A

GUIDE TO THE TREATMENT

OF

DISEASES OF THE SKIN:

WITH

SUGGESTIONS FOR THEIR PREVENTION.

FOR

THE USE OF THE STUDENT AND GENERAL PRACTITIONER.

Illustrated by Cases.

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PREFACE TO THE SECOND EDITION.

NEARLY ten years have elapsed since the author, having long devoted a large share of attention to the study of Diseases of the Skin, was induced to offer to the profession, a volume of observations on a successful mode of dealing with those troublesome cases, which, up to that time, had been pronounced by every writer on the skin *intractable* or *incurable*. In the preface to the first edition of this work are these words,—" The day has dawned which will see this opprobrium medicorum consigned to the pages of history." This prediction has been literally fulfilled. Every author who has recently written on the subject, has spoken in much more hopeful terms of the *prognosis* of chronic cutaneous diseases: and to use the emphatic language of a medical periodical, they may now be said to be " transferred en masse from the category of the incurable to that of the curable maladies." It does not become the author to pronounce how far this im-

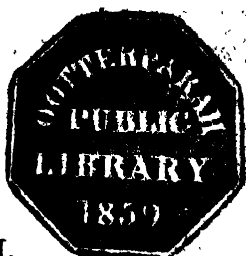
[illegible] due to his own labours; it is enough for him to have been spared to see the commencement of a revolution in this department of medical practice, and to have learned that his suggestions have been largely acted upon, not only in this country, but on the continent also, as well as in America, and with great success.

The first edition of this work, consisting of 1000 copies, having been disposed of, the author has been induced to remodel, and almost rewrite the whole, with a view to supply the student with a great desideratum, namely, a cheap and intelligible guide to the treatment of those forms of cutaneous disease, which are usually passed over or but slightly noticed in works on surgery and medicine.

A few practical directions for the treatment of ulcers of the legs have also been appended; as well as a chapter on the prophylactic treatment, or prevention of diseases of the skin.

23, Alfred Place, Bedford Square.

June, 1857.



CHAPTER I.

INTRODUCTORY OBSERVATIONS.

1. ON THE VARIOUS MORBID INFLUENCES WHICH EXCITE DISEASE IN THE SKIN, AND DETERMINE ITS CHARACTER.

As this little work is intended, as its title indicates, rather as a guide to treatment, than an entire treatise on the pathology of the skin, it will be assumed that the reader is already practically acquainted with the anatomy and physiology of the skin; we shall therefore proceed at once to the consideration of its diseases, with a view to their treatment.

Diseases of the skin have been divided by Willan into eight *orders;* and to this division, and to its nomenclature, we propose to adhere. But, before describing them, it will be well to look at the skin as subject to certain *morbid influences,* which, whether from within or without, not only give a character to the disease, but must be specially studied with a view to enlightened and successful treatment. For instance, the small-pox reveals the existence of a morbid influence of a specific kind, producing an eruption of pustules. But pustules may arise also from morbid influences of a widely different nature; therefore, in

treating pustular diseases, we have not to treat pustules, but we have to contend with the morbid influences which have thrown out the pustules, whether they be variolous, as in small-pox; cachectic, as in ecthyma; parasitic, as in scabies; syphilitic, as in lues; or antimonial, as in the eruption produced by the potassio-tartrate of antimony. The pustules thrown out from these and other sources of disease, are sometimes so similar in appearance as to deceive the most practised eye. Many cases are annually sent to the Small-Pox Hospital, diagnosed as small-pox by medical practitioners, which turn out to be some other eruptive disease.*

It is therefore necessary to be familiar with the various morbid influences which are productive of eruptive diseases, and with the manner by which these influences are manifested in the system, independently of their appearance in the skin. In fact, the eruption is but the mode in which the blood-poison within is naturally eliminated from the system; and, so long as the eruption is allowed to run its own course without check or stimulus, so long it remains an important *sign* of the nature and severity of the blood disease, or other morbid influence which throws it out, regulates its force, and determines its character.

Some of these influences are necessarily felt but for a limited time, as in the eruptive fevers, in which the poison exhausts itself in a few days or weeks, and the patient either sinks under its fatal spell, or recovers spontaneously. Other influences, less actively destruc-

* Mr. Marson assures me that, during the last twenty years, *several hundreds* of patients have been sent to the Small-Pox Hospital with eruptive diseases not small pox, but which were believed to be small-pox.

tive, operate with little or no intermission, from the period of their first attack to the end of the patient's life, unless they are countervailed by therapeutical interference, as in the diseases in the squamous group.

Here, then, we have a natural division of universally acknowledged importance, namely, the *ephemeral* and the *persistent*. Some of the persistent diseases are ephemeral and recurrent during the primary attacks, and become persistent at length. But there is a third class, depending upon the influence of certain natural epochs or critical periods in the life of the patient. Thus we have the *crusta lactea* of infancy (porrigo larvalis), the *ring-worm* of childhood (porrigo scutulata), the *acne* of puberty (acne simplex), the *sycosis* and *acne rosacea* of manhood, and the *prurigo senilis* of old age. To these might be added the *nævus* of fœtal life, and the *ephelis* of pregnant women.

Therefore, in searching for those morbid influences which are developed in the skin, the student will do well to regard all skin diseases as either *ephemeral*, *persistent*, or *climacteric*.

The next important point to be noticed, as regards morbid influences, is that some of these diseases are contagious, or communicable from one patient to another, others are not so. And it is remarkable that this wide distinction (not less pathologically palpable than all-important in practice) exists in all the above divisions. Not only are some of the ephemeral class contagious, as *small-pox*, and others not contagious, as *herpes zoster*; not only are some of the persistent communicable, as *scabies*, others not so, as *lepra*; but, strange to say, the climacteric class contains con-

tagious diseases, as *ring-worm* (contagious only in childhood), and a form of *pityriasis* (contagious only in adult age), as well as non-contagious diseases, such as *strophulus*, *acne*, and *prurigo*, none of them communicable at any age.

Diseases of parasitic origin (if such there be) may be included under the *contagiosa*, in one or other of these classes. But it must not be forgotten that the minute animal or vegetable forms which the improved microscope has detected subsisting on the human skin, are not always the *cause*, but more frequently the *effect* of the morbid condition. Nor are we yet certain that any genera of animalculæ are destined to subsist on the human integument in its most healthy and vigorous condition.

Injuries of the skin, from burns, scalds, the sun's rays, cold, the stings and bites of insects, handling

Tabular View of the Morbid Influe

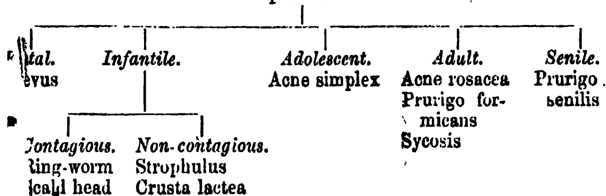
1. Ephemeral Influences produce		2. Persistent Influences produce	
Contagious.	*Non-contagious.*	*Contagious.*	*Non-contagiou*
Variola	Herpes	Scabies	Lichen
Vaccinea	Erythema	Pityriasis lutea	Lepra or
Varicella	Ecthyma		Psoriasis
Scarlatina	Furunculus		Pityriasis
Rubeola	Anthrax		Ichthyosis
Roseola	Purpura		Impetigo
Erysipelas	Sudamina		Rupia
Frambœsia	Miliaria		Eczema
	Urticaria		Molluscum
	Pemphigus		Vitiligo
			Cancer
			Lupus
			Elephantiasis

powdery substances, excoriations, as also ulcers depending on mechanical causes, and ready to heal when these are removed, are not properly described as diseases; but some of them are easily mistaken for disease, particularly stings, bites, and excoriations.

Leaving these, then, out of the question, we have before us a simple view of the causes or morbid influences operating on the skin, in almost every form of eruption to which it is subject.

The following table will exhibit this in an intelligible form, and will be found useful to help diagnosis. The only diseases mentioned by Willan which are not included in this synopsis, are *pompholyx*, *ephelis*, *spilus*, and *aphtha;* but pompholyx is only another name for pemphigus, and ephelis for a form of pityriasis. Spilus is a kind of nævus; and aphtha is a disease not of the skin, but of the mucous membrane.

ginating Cutaneous Disease.



II. DIAGNOSIS.

It is an extraordinary fact, that to the modern medical student, well versed in the use of the stethoscope, diseases of the internal organs, concealed from view, present fewer diagnostic difficulties than diseases of the skin, which are visible. It is not, however, that the ear is more to be trusted than the eye, but simply that the ear is instructed in the sounds of the chest, the student is tutored to observe and discriminate them, and to confirm their indications by *post mortem* inquiries; whereas but few students have been instructed in the diagnosis of diseases of the skin, common as they are. Until of late, but few even of our hospital physicians or surgeons were able to distinguish one cutaneous disease from another; and some of them are even now frank enough to avow it, and think it of little importance. Hence it is that the study of cutaneous disease has necessarily become a special branch of medical practice; and truly the great variety of these diseases, the number and frequency of their complications, the many difficulties presented both by their diagnosis and treatment, and the pain and misery often attending their development, render them worthy, not only of special attention, but of the study of a whole life.

The difficulties of diagnosis have been further increased by the popular nosology of cutaneous disease. They are classed and distinguished by their primary forms, rather than by their matured and well developed appearances; so that such a disease as lupus exedens, which, as the student generally sees it, presents the features deformed and deficient—the nose or lips, or both, partly eaten away—is seldom recognized in its

primary form, a harmless looking tubercle or scab occupying the tip or ala of the nose. Again, the scaly-looking crusts of eczema, in their advanced and dried condition, never suggest to the tyro the minute vesicle of transparent fluid which is described as the diagnostic character of the disease. To remove these difficulties and discouragements, it will be our object to describe the secondary as well as the primary characters of each disease.

But it is not enough to have discovered the name and nosological status of the disease. This will seldom of itself determine the treatment.

In the diagnosis of these disorders, the most important, and sometimes the most difficult point, to be determined, is whether they be of syphilitic origin; many of them, especially the squamosæ, being occasionally of this nature, and requiring the same treatment as other forms of lues. The reddish-brown, or copper coloured appearance of the eruption, taken in connexion with the history of the case, will generally lead the experienced and observant practitioner to a correct judgment; and it is infinitely more important to determine this question rightly, than to assign the case to its proper order and genus. If there be reason to conclude that the case is not syphilitic, the next point requiring attention is whether the eruption be complicated with any other deviation from health, local or constitutional; and especially whether there be a febrile condition of the system, a quick pulse, a hot surface, deficient secretions, local pain, or other marks of increased vascular action; and this is equally necessary in the chronic forms of skin disease as in the eruptive fevers.

Having determined that the disease is not any one of the specific eruptive fevers, the next question is, what is its natural history and peculiarities? Is it ephemeral and temporary, recurrent and periodical; or is it naturally persistent, and liable to become inveterate and tormenting for the whole life? The diagnosis will thus determine the prognosis. The next question is, whether the disease be contagious? And lastly, is the disease one of infancy, or dentition? one of childhood, puberty, or of adolescence? is it connected with the uterine functions? is it peculiar to mid-age, or is it a sign of natural decay? A confident and decisive determination of these questions, given at the outset, will go far towards the successful treatment of the disease, not only by suggesting the right course to be pursued, but by inspiring the patient with confidence and hope, and thus securing his concurrence and perseverance in adopting and carrying out our prescribed management. And it is positively essential that this diagnostic dictum should be given at once. In many internal diseases we cannot do this; we must wait and watch, and test the secretions,—and sometimes test the disease by cautious treatment, too,—before we can assure either ourselves or our patient what it is we have to deal with.

Not so disease of the skin. The man who is practically familiar with the various forms, phases, complications, and tendencies of cutaneous disease, ought to be able, with a good light, to pronounce on it at first sight. The student, therefore, should carefully trace the relation of the disease before him to one of the morbid influences described in the foregoing synopsis. The age and sex of the patient will at once limit the

inquiry to a small class of diseases. The history of the disease, its origin, date, advance or decline, its relation to the general health, and especially to certain organic functions, must all be taken into account; and *last*, not *first*, the character of the eruption, its present appearance, and its primitive form, must be carefully observed.

III. GENERAL OBSERVATIONS ON TREATMENT.

The diagnosis being accurately determined, the *treatment* must in the first instance be regulated by established principles. Every obvious, local, or constitutional disorder which may happen to complicate the eruption, and which, in some cases, originates and sustains it, must first be rectified if possible. Disordered secretions require particular attention; the digestive organs must be watched and regulated, and the general health restored (if it be deranged) by appropriate remedies. All this must be done, and done effectually, before especial attention is directed to the cutaneous disease, except in those cases in which the health suffers as a result, and not as a cause of the eruption. And under all circumstances we must watch for the symptoms of any increased vascular action or febrile excitement which so frequently accompanies chronic affections of the skin. It is to be feared that this latter indication, though clearly pointed out by modern writers, is too much overlooked in practice. In adapting to the case in hand our depleting measures and cooling regimen, we must bear in mind that we have to deal primarily with an inflammatory disease, extending sometimes over a large

portion of the surface of the body; and that the skin is plentifully supplied with blood-vessels, exhaling normally a considerable quantity of fluid, which exhalation is often permanently suppressed, giving rise to congestion of the cutaneous vessels. The tender skin is likewise exposed to an atmosphere capable of becoming an irritant in disease. The most tormenting cases of skin disease often consist of extensive inflammatory action of an acute type, but of long duration, thus combining the acute and chronic character. We find a quick full hard pulse, a skin universally warmer than natural, and in the diseased portions the patient suffers extremely from sensations of burning, smarting, itching, pricking, and stinging. The blood taken from the arm will occasionally, but not always, be found both cupped and buffy. If these symptoms occur in a plethoric subject, a second or third bleeding may, in extreme cases, be required at intervals of a week or ten days; and leeches must be applied occasionally to the red margins of the more recently affected portions of the skin. In addition to this, it may be absolutely necessary not only to restrict the patient to a low diet, but to administer active aperients, salines, and antimonials, in doses which will not severely rack the stomach, an organ which it is important to keep in tone during the treatment of these diseases. This system must be pursued for days, weeks, and even months, if necessary, until the smarting and tingling have in a great degree subsided, and the cool skin, quiet pulse, and tranquil nights suggest that the period is arrived for the commencement of the alterative treatment. A premature exhibition of alteratives is a great error, and often fatal to success; and even

after the alterative course has been properly determined upon, the pulse must be watched, the bowels regulated, and all inflammatory tendencies checked at their onset, and ultimately subdued if necessary by a few doses of Plummer's pill or other mercurial adjuvant. These are, however, extreme cases. They occur chiefly in country practice, amd even then, they are of much less frequent occurrence than formerly. In the milder cases of inflammation where the general febrile action is not so obvious, but there is much smarting or pruritus, topical bleeding or a reduced diet may suffice. Occasional purgatives are useful, if not essential, in nearly all cases, and are of more service at intervals than when administered too frequently. There is no sort of reliance to be placed upon external applications, and they should be used with great caution. Warm or tepid baths of fresh water often prove a source of much comfort to a patient in the febrile stage of chronic cutaneous disease. The same may be said of fomentations; they are seldom or never curative, scarcely auxiliary to the cure, but they soothe and amuse the patient, who likes to be doing something, and often speaks gratefully of their effects. Sea-water, sulphur-fume, and hot-air baths, are all injurious to the inflamed surface, and generally unnecessary when the inflammation has been subdued. Equally needless, and not seldom hurtful, are the thousand-and-one ointments, lotions, and other applications which have been recommended in these diseases.

Much judgment, however, is sometimes required to fix the proper limits of the antiphlogistic treatment. Ecthyma, a disease of debility and poverty, has been known to take place of lepra, and eczema has often

degenerated into impetigo when the low diet system has been carried too far,—a condition which must be rectified by tonics. Indeed the degree of success attending the alterative treatment will much depend upon the nicety with which we have previously adapted our depleting measures to the actual necessities of the case. If the patient be much reduced, powerful tonics may be necessary to his recovery, and there are cases in which they are found requisite from the very commencement of the treatment. *Both plethora and anæmia are conditions highly unfavourable to the recovery of lost health, and must be removed before the skin can become permanently sound.* Among the poor, and especially poor infants and children, cutaneous disease often presents a type of debility from the first. And this may be ascertained not so much from the character of the eruption as from the general condition of the child. Squalor and emaciation, the sunken eye, the piteous sigh, the pale upper lip, together with a tendency to pustulation in the eruption, are but too obvious signs of imperfect nutrition, and a general anæmic condition of the system. In these cases mild purgatives are very useful, but they should be combined with tonics; and cod-liver oil often supplies the great want—a nourishing diet.

Thus, by rectifying what is obviously wrong in the general system, we put the patient into a condition in which the local disease has a chance of getting well. And sometimes this is all we have to do; the *vis medicatrix naturæ* will accomplish the rest. It more frequently happens, however, that the eruption continues in a milder form for some time, then begins to spread, and finally relapses into its original condition. To

prevent this, many alterative remedies have been tried with various degrees of success.

Of these, arsenic has for a long period enjoyed the highest reputation. But, unfortunately, owing to a very general misapprehension of the conditions requisite for its successful operation, it frequently fails to eradicate the disease for which it is prescribed. It is likewise believed by many practitioners to be a dangerous medicine; and, on that account, it is proscribed and repudiated, perhaps by more than half the members of the profession. I venture to hazard the opinion, that arsenic will one day be universally esteemed as one of the most valuable of medicines, and that its administration will be attended with far less danger than that of mercury, antimony, opium, or any other poison now used medicinally.

Arsenic is known to be a virulent poison in a large dose; and it is said to have the power of wasting and destroying the vital principle with equal certainty, when small but deleterious doses are incautiously repeated too long together. A belief in the truth of this allegation has probably deterred many discreet practitioners from its due administration. It must be admitted that, though the reputation of arsenic as a slow but certain poison in medicinal doses, rests upon evidence which might fairly be challenged, yet it has such an extraordinary action over the human system, an action so unlike anything else, and in a poisonous dose so rapidly and unaccountably destructive, that double and treble caution should ever be used in administering the mineral medicinally, even in very minute doses. It behoves every practitioner who prescribes so virulent a poison, to acquire all the knowledge he can obtain of the

phenomena to be expected under its use, not only as regards the suspension of diseased action, but more especially with reference to its influence on the general economy. This knowledge is but scantily supplied by authors; and it was one chief object of the publication of the first edition of this little work, to make known the results of my own experience, after having watched the effect of the medicine for many years. The reader may rest assured, that the dangers attending the medicinal use of the mineral have been greatly exaggerated, and that its destructive properties have never been manifested, except in the hands of practitioners who knew not how to regulate its use. I have now administered arsenic to patients, in small but efficient doses, for months and years together, in several thousands of cases, and have watched in vain for the alarming effects attributed to its use. During more than thirty years observation, I have rarely known it produce any unpleasant effects on the system in a degree incompatible with perseverance in its use; and I have taken the pains to make extensive inquiries among more than a hundred of my professional brethren most familiar with its use, and their testimony to the *safety* of the mineral, when discreetly administered, is, without a single exception, in perfect harmony with my own experience.*

Indeed, there are few medicines less likely to do harm than arsenic, when administered in the manner about to be described. In the hands of practitioners experienced in its use, I consider it absolutely safe. It is a medicine which never requires to be *pushed*. It

* "Memoir of the Medicinal Action of Arsenic". *Transactions of the Provincial Med. and Surg. Association*, vol. xvi, part 2.

is a remarkable fact, that doses large enough to disturb the system generally, often aggravate cutâneous diseases, which nevertheless will yield to smaller doses; so that *its curative powers appear to reside alone in doses too small to be mischievous.* It is impossible to hurry its operation: every attempt of this kind, not only fails, but retards the wished-for result. But the patient, persevering administration of small doses, under favourable circumstances, for weeks, months, or years together, will be found to exercise an almost omnipotent influence over the cutaneous diseases to which it is adapted.

The numerous failures of arsenic, as an internal remedy for skin diseases, may be traced to one or more of the following sources: 1. The syphilitic character of cutaneous disease is often overlooked; arsenic is prescribed where mercury is wanted, and the former medicine has only a limited and temporary influence in most of these cases. 2. Some practitioners administer arsenic during the inflammatory or febrile stage of cutaneous disease, under which circumstances it rarely fails to increase the inflammation, and never does any good. 3. Other writers direct it to be given on an empty stomach, and are often obliged to abandon it on account of the gastric irritation it is said to excite.* 4. Many practitioners prescribe it in doses too large, and at intervals too distant, to obtain the full benefit of the medicine; and *lastly*, all the writers I have as yet had an opportunity of consulting, both British and foreign, direct it to be given in *gradually*

* This practice, it is to be hoped, is now pretty generally understood to be an error.

increasing doses. This, as it is the most common, often proves to be the most serious error.*

The general result is, that although in spite of all this mismanagement, cutaneous diseases very often yield to the medicine; yet few practitioners can be found who prescribe it with confidence and perseverance, and perhaps still fewer with satisfaction and success. If mercury were generally exhibited in the same timid and unsystematic manner, the day of its reputation would soon be drawing to a close.

The proper mode of prescribing arsenic may be inferred from its therapeutical properties; and as these appear but indifferently understood, I will endeavour to place them in such a light as shall render obvious the practical inferences I have drawn from them.

1. There is especially one property in arsenic, regarded as a medicine, which must be duly appreciated in prescribing it before it can be administered with safety or general success; I refer to its *cumulative* effects on the system. So long ago as 1807, Dr. Bardesley, of Manchester, pointed out this peculiarity. He says, he has observed the arsenic to accumulate in the system after using it for a time, and to produce flying pains, flatulence, paralytic affections of the limbs, and other unpleasant symptoms. He therefore objects to the too long continuance of the medicine. M. Rayer also observes, "that the effects of arsenical medicines, slow and silent in the beginning, may sud-

* Modern writers have generally adopted the author's views of the danger of this practice. And, in short, the improvement in the mode of administering arsenic, which has recently brought cutaneous diseases under the control of medical treatment, consists chiefly in giving it on a full stomach, and in either uniform or decreasing doses.

denly acquire greater intensity, and prove the cause of lesions more or less severe in their nature". He likewise adds, "it would be culpable temerity to persist for too long a time in the use of remedies possessed of such energetic actions on the economy, that they are apt themselves to become the cause of serious disorders."* Hufeland speaks in similar terms of the "disastrous effects of arsenic after a considerable time."† Arsenic is not the only medicine which has a tendency so to accumulate in the system as to appear inert for a time, and then suddenly assert its influence in a degree more or less alarming. Digitalis and colchicum have also this property. On the other hand, opium and antimony act with more efficiency at first; and as the system becomes habituated to their presence, the dose must be gradually *increased*. That the system should thus manifest increasing intolerance of repeated doses of some medicines, and accommodate itself by degrees to constantly augmented quantities of others, is not very easy of explanation; but the fact being well established, the practical inference is plain;—as the latter medicines must of necessity be exhibited in *increasing* doses in order to ensure any long continued effect,—so if we would have the benefit of the cumulative poisons, *on safe conditions*, it is obvious that the dose must be gradually *decreased*. Accordingly, every judicious practitioner, in prescribing digitalis or colchicum, commences with a full dose, which he reduces by degrees as the effects become palpable. *Arsenic administered in this way is a safe and efficient medicine.* If, on the contrary, the doses, however small at first, be gradually augmented (as is

* Rayer on the Skin, p. 88. † Journal de Médecine, 1811.

sometimes directed), by daily increments, it may become at length a *dangerous poison;* and it will probably prove, for more reasons than one, an inefficient medicine. Let it not be understood, however, that a large dose is requisite even at commencement. Five minims of Fowler's solution three times a day is sufficient to begin with, and this dose must be reduced as occasion may require.*

2. The next peculiarity of arsenic to which I entreat attention, is the sudden arrest of diseased action often observable under the exhibition of the maximum dose. In this respect, some analogy may be traced between the operation of arsenic and that of mercury. John Hunter taught, that in order that the influence of the latter medicine may be brought to bear with full effect upon certain forms of syphilis, a given quantity must be introduced into the system in a given time; after which, the gums being tender, smaller doses will suffice to keep the morbid action under arrest. This is illustrative of the action of arsenic in cutaneous disease. A full dose being first administered at regular intervals, in a few days (or possibly weeks), a pricking sensation is felt in the tarsi, and the conjunctiva becomes slightly inflamed. *At this crisis the disease is brought under arrest, and generally from this period appears to be shorn of its strength.* The return of healthy action in the cutaneous vessels often becomes visible, and is sensibly felt by the patient, on

* This solution keeps better when made without the compound spirit of lavender. But I have recently found reason to prefer another preparation of arsenic, the liquor arsenici chloridi of the London Pharmacopœia, formerly known as Dr. Vallangin's "solution of solvent mineral". It is a much milder preparation than Fowler's, twelve minims being equivalent to five of the latter.

the very day on which the eyes become suffused with tears. The dose may now be reduced, and in some cases a very small dose taken with exact regularity will suffice to keep the eyes tender and the skin healing, until at length even the disposition to disease appears to die away under the influence of the poison. And as in the exhibition of mercury we are content with making the gums sore, without distressing the bowels, so in administering arsenic, we should never allow the mucous membranes to suffer materially under its use: for supervening gastritis, and even colicky pains, most clearly contra-indicate its use. Fortunately a slight degree of conjunctivitis, in about forty-nine cases out of fifty, takes precedence of the more grave affections which indicate an over dose. Both the safety of the patient and the prospect of his recovery will much depend upon the vigilance with which a knowledge of this fact inspires the surgeon. Ignorance of the existence of this safety-valve has caused many a cautious practitioner to repudiate the medicine altogether; and an acquaintance with this important sign would, doubtless, on the other hand, have checked the temerity which, in its results, has attainted with unmerited suspicion the reputation of a valuable remedy. I am not sure that any reliance is to be placed on this test when arsenic is taken either fasting or in increasing doses; for here a sudden disturbance of the primæ viæ may occur synchronously with the conjunctivitis, and being more painful and urgent in its nature, is likely to be complained of by the patient, while the latter affection being slight, may not be mentioned, and thus may escape the notice of the surgeon. In the exceptional cases, in which the con-

junctive membrane escapes altogether, it very often happens that catarrhal symptoms prevail, but rarely to such an extent as to forbid persistence in the use of the remedy. Occasionally, vesications of the soles of the feet, and more rarely of the palms of the hands, present the first indication of an overdose.

3. There is yet another singular property in arsenic, perhaps peculiar to it, which I have observed very frequently, and which is full of practical instruction. It is one of the results of its cumulative power. Excessive doses often produce so strong and lasting an impression on the nervous system, especially in delicate subjects, as to render it, for months or years subsequently, so intolerant of the medicine, even in the smallest doses, as absolutely to interdict its use. There are no cases so difficult of management as these. A patient consults us for a disease of the skin: we administer arsenic in doses of five minims of Fowler's solution three times a day; and the patient complains in a day or two of nervous tremors, disturbed rest, horrible dreams, and other affections of the sensorium; and if we persevere, the disease seems to evade the healing influence of the arsenic. Upon inquiry it is found that the patient has previously been taking arsenic in large or increasing doses; the system is already impregnated with the poison, and thus, for a time, unfitted for its further exhibition. I discovered the true nature of these cases from an accidental circumstance, and I have since found that all attempts to push the medicine in large doses have proved abortive, giving rise to a condition of the system intolerant of

the medicine, and insusceptible, for a time, of its therapeutic influence.*

4. It is not generally known that arsenic, which in large doses irritates the bowels, in small doses soothes them, and is of eminent utility in checking the chronic diarrhœa and gastric irritation, which frequently complicate disease of the skin. Many practitioners would consider weak or irritable bowels contra-indicative of its use; but I have met with several cases in which arsenic in small doses not only restored the healthy condition of the skin, but effectually stopped the diarrhœa which accompanied the cutaneous affection throughout its whole course; and in other cases dyspeptic symptoms complicating tubercular eruptions, having resisted the usual remedies, have yielded readily to arsenic, which also restored the skin: These facts are startling at first, but they are readily explained. Both the internal and external surface were, in these cases, in a morbid condition from some derangement of the general health: the arsenic rectified this, and the source of irritation being removed, both the skin and the mucous membranes recovered their healthy tone. In these cases also, large doses of arsenic would be highly objectionable,—dangerous as well as useless.

5. It remains to be observed, that some individuals are affected by arsenic in a peculiar way. 1. Some appear by nature unusually susceptible of the influence of arsenic, and intolerant of the usual doses. Mr. Girdlestone, of Yarmouth, relates a case of this kind.

* It is scarcely needful to observe that there is not one word of truth in the ridiculous stories about the "Styrian Arsenic-eaters", which have been going the round of the popular magazines.

Happily this circumstance is no impediment to the use of the medicine, an exceedingly small dose of which will suffice, in such cases, to control diseased action after it has been once arrested by a competent dose at the commencement. *A fourth part of a minim* of Fowler's solution taken thrice a day, has, in a few weeks, effected the permanent cure of psoriasis guttata, in a female of delicate habit, intolerant alike, in a high degree, of all mineral substances. 2. An opposite condition of the system is sometimes met with, in which small doses may be administered for a long time without producing any visible or sensible effect: but these cases are extremely rare, and where very large doses are reported to have been borne with impunity, it is safer to conclude that the solution was accidentally deficient in strength, than that the human system is ever proof against unlimited or indiscreet doses. 3. There is a third peculiarity in some individuals in reference to the affects of arsenic, and this is so common among persons of fair complexion or delicate skin, that I am not sure whether it is not the rule rather than the exception.* It is this: that whereas conjunctivitis is a primary effect of small doses of arsenic, it has also after a time a secondary effect. The trunk of the patient first, and subsequently all those parts of the body which are by the dress protected from the access of light and air, become covered with a dirt-brown, dingy, unwashed appearance, which, under a lens, reveals a delicate desquamation of the dermis, and is, in fact, a faint form of

* No author had noticed this when the first edition of this work was published; but, since its publication, a recent writer has put forth a claim to its discovery.

pityriasis. This may be considered as a secondary form of arsenicalization; for I have observed that when the primary dose is diminished on the appearance of conjunctivitis, the eyelids may be allowed to get well; yet if the patient's skin be kept *brown*, the disease will vanish just as rapidly as though the conjunctiva were kept sore. The first and larger dose appears to knock the disease on the head (so to speak), and to exhaust its energy; its less malign, or secondary form, being subjugated by the secondary or pityriatic action of arsenic.

From this review of the medicinal action of arsenic in minute doses, and from the observations which precede it, the reader will readily perceive the propriety of adopting the following *principles* in the treatment of chronic diseases of the skin; and he will further be prepared to understand and account for the remarkable success attending the practical operation of these principles, as detailed in the cases which follow.

1. Diseases of the skin may be depending on some special *local or general cause;* as scabies, eczema solare, eczema mercuriale, etc. These causes should always be detected, and if possible removed. And it should be observed that scabies is not always a vesicular disease as described by authors, and in fact that almost any form of eruption may arise from any of these exciting causes.

2. In the absence of these special causes, functional irregularities, disordered, deficient, or redundant secretions, and other accidental *complications*, must be treated on established principles, and rectified, if it be practicable, before especial attention is directed to the skin.

3. The pulse, and the temperature of the skin, if abnormal, must be reduced to a healthy standard by antiphlogistic means.

4. These preliminaries having been duly observed, the disease will either get well spontaneously or not. If not, it is either syphilitic or otherwise; if syphilitic, it must be treated accordingly; if otherwise, arsenic is the best alterative remedy.

5. Fowler's solution of arsenic may be given in doses of five minims three times a day, or the liquor arsenici chloridi in doses of ten or twelve minims; the solution may be mixed with a little water, or with the beverage drank with or after meals. This dose should be taken with exact regularity, and the patient should be examined at first twice a week. When the conjunctiva becomes inflamed, the dose should be reduced, but the medicine must not be entirely abandoned *until weeks or months after all disposition to morbid action appears to have subsided.*

6. If the cutaneous disease should assume an inflammatory type during the arsenical course, it will seldom be necessary to discontinue the arsenic; but it will be requisite to reduce the inflammation by a smart purgative, or by the application of a few leeches to the inflamed portions of skin, and reducing the diet.

7. The arsenical course should be protracted, in reduced doses, for about as many *months* after the final disappearance of the disease, as it had existed *years* before. This will prove the best security against a relapse, and will generally succeed in preventing it.

8. In plethoric or inflammatory subjects the disease will yet be liable to relapse, unless the diet be so regulated as to keep the system always free from in-

creased vascular action. In some cases stimulants must be entirely abandoned, in others a sparing allowance of animal food appears to be essential to the preservation of the health; and in a few, a vegetable diet for life.

9. In subjects disposed to anæmia, a nourishing diet, with cod-liver oil, iron, and other tonics, and above all, moderate daily exercise in the open air, are the best preventives, as well as important auxiliaries in the treatment.

10. Cutaneous diseases are sometimes complicated with diarrhœa, dyspepsia, or general irritability of the intestinal canal. If this condition cannot be remedied by common measures, arsenic in small doses will be found to soothe the bowels (the pulse being quiet), in proportion as it allays the irritability of the skin.*

11. Some individuals are, from idiosyncrasy, unusually susceptible of the effects of arsenic. In these cases doses of one or two minims, or even less, of Fowler's solution, will prove as effectual as a larger dose in common cases, and will generally be borne with impunity. The curative powers of arsenic will, in all cases, be found to reside in doses too small to be mischievous. In other individuals, chiefly children from eight to fourteen, I have sometimes found unusually large doses both harmless and necessary.

Iodine has, I think, been unduly estimated as to its influence over cutaneous disease. Those who extol it most, almost invariably prescribe it in union with arsenic, and sometimes with mercury also. Arsenic, which is the efficient remedy, is thus made to occupy

* This assertion has been treated with ridicule; but I venture, after ten years further observation, to repeat it.

the second place, whereas, in fact, it is the principal, and its union with iodine and mercury, often without in any degree adding to its therapeutic efficacy, just serves to make it unmanageable and dangerous. Indeed, my own experience justifies me in asserting, that if there be any efficient medicine more safe and manageable, in careful hands, than another, it is arsenic united with chlorine, soda, or potass; but if there be any medicine more dangerous and unmanageable than another, it is the compound of arsenic, iodine, and mercury, known by the name of "Donovan's solution".

Nevertheless, the unfounded prejudice entertained by the public (and shall I say, in some degree, by the profession?) against arsenic as a medicine,—a prejudice fostered and augmented by some silly accounts from Germany, lately published in the popular periodicals, and to the truth of which I have ineffectually challenged the editors to the proof,—this prejudice, I say, throws a practical difficulty in the way of efficient treatment; and I have consequently been for years anxious to discover some medicine not less sinning, but less sinned against, than arsenic, as a substitute for it.

Three anti-squamous, or "anti-scorbutic" remedies have of late been extolled by the medical press, namely, *Urtica*, *Galium*, and *Cod-liver Oil*. I am surprised that any author should have mentioned the urtica as a new remedy. Fifty, if not a hundred, years ago, the stinging nettle was "*the* cure" for nettle-rash, and other eruptions, used by the country people. The same observation applies to the Galium Aparine, which has had for centuries a similar reputation.

The *Urtica Urens* (dwarf stinging-nettle) I tried in decoction many years ago. It appeared to exercise no influence over the system other than that of a mild diuretic, and certainly has no specific power over cutaneous disease. It relieves those aggravations of disease which depend upon imperfect action of the kidneys and the skin; but this is just as easily effected by colchicum, antimony, taraxacum, digitalis, and other vegetable diuretics and diaphoretics.

The *Galium Aparine* (clivers, or goose-grass) probably acts in a similar way. It is certainly no specific for lepra, and I greatly doubt if it will, in any case, supersede the necessity of administering arsenic. Two or three years ago this medicine was, however, mentioned in the periodicals by practitioners of high repute as a remedy for lepra, and I consequently determined to give it a trial. In order that there might be no mistake, I obtained the green and fresh herb from the fields near Kentish Town, boiled it down in as little water as possible, after the method of making decoction of sarsaparilla, and directed the patient to take a wine-glass full, or as much more as the stomach would bear, three times a-day. I took care that the decoction should be always fresh and clear, and when it could not conveniently be prepared for the patient, he was supplied with the plant, either fresh or carefully dried, and directed to boil it himself. It was thus administered or prescribed in about twenty cases. Of its effect in ten of these cases, I am not able to give any satisfactory report. Of the remaining ten, six were cases of lepra, two of eczema, one of acne, and one of lichen. In the scaly class the benefit was the most obvious, *but in every case only temporary.*

Cod-liver Oil.—If there is any one medicine which is at all to be compared with arsenic in its power over skin disease, that medicine is the cod-liver oil sold in bottles as Dr. De Jongh's oil. I am not prepared to say that there is no other oil that will answer the purpose as well, but as there is no medicine in the market more grossly adulterated than what is called cod-liver oil, I insist upon my patients procuring this article, which I know to be genuine, not only by analysis, but by the invariably satisfactory operation of the medicine in very small doses, in the cases to which it is appropriate. These are chiefly those accompanied with wasting of the flesh from whatever cause, mal-assimilation, defective nutrition, variable appetite, deficient food, strumous disease, etc. The cutaneous diseases most benefited by the oil may be cited in the following order, strumous sores, sycosis, lupus, acne, prurigo, lichen, eczema. Perhaps it is not a specific for any one of these, but in all of them it often proves an important, if not an essential adjunct. The dose of Dr. De Jongh's oil is a teaspoonful three times a-day, which may be gradually increased to a table spoonful if necessary. The signs of an over-dose are, a sense of fulness about the head, slight fever, and sometimes vertigo.

In pointing out, individually, the diagnosis and treatment of the various forms of disease to which the skin is subject, I shall proceed on the plan of the first edition of this work, following the order of Dr. Willan, and occasionally illustrating the text by cases.

The diseases of the skin were arranged by Dr. Willan in eight orders, according to certain external forms presented by the primary outbreak.

These orders are as follows :—namely,

Order 1. Papulæ (pimples).
2. Squamæ (scales).
3. Exanthema (rashes).
4. Bullæ (blisters).
5. Pustulæ (pustules).
6. Vesiculæ (vesicles).
7. Tuberculæ (tubercles).
8. Maculæ (spots).

A more full description of the character proper to each order will be given as we proceed.

CHAPTER II.

ORDER I.—PAPULÆ.

Papulous disorders are characterized by "*an eruption of small pimples terminating in scurf, and at no period containing any serous or purulent matter.*"

Occasionally, however, when attended by much inflammation, a slight effusion of lymph takes place, which gives a vesicular appearance to several of the papulæ; but the fluid is re-absorbed without breaking the cuticle. The disease terminates, not in scabs or crusts, but in *scurf*. There is but little difference between the primary and secondary appearances of papulous diseases.

Under this order Willan has placed three genera, viz.: *Strophulus*, *Lichen*, and *Prurigo*.

Strophulus is a disease of infancy, and well known to nurses under the name of red gum, or gown. The pimples are of a vivid red colour. It is an ephemeral disease, and rarely requires medical treatment.

Lichen is the same disease in the adult, but it is not always ephemeral; being more frequently permanent, though sometimes evanescent and recurrent. Willan describes it as "connected with internal disorder;" but as this is equally true of cutaneous diseases generally, it is no distinction. He also mentions

seven varieties, which he might with equal propriety have described as seventy. Bateman truly says, "there is scarcely any limit to the varieties of these papular affections." Like all other eruptive diseases of this class, lichen is attributed by authors to a great variety of causes, every one of which is a mere matter of guess, the most plausible guess being the heat of tropical climes, which has given the distinctive cognomen to one variety, "Lichen Tropicus"; but even this variety occurs from other causes; for it is acknowledged to be very common in this country, and at almost all seasons.

The following cases will illustrate both the character and treatment of the disease.

CASE 1.—*Chronic Lichen occurring first in the puerperal state, and afterwards assuming an obstinate character, until subdued by arsenic.*

Mrs. E., a middle-aged lady, mother of a large family, consulted me on account of an eruption of papulæ appearing in patches, not circumscribed, but irregularly diffused over nearly the whole surface of the body.

July 10th, 1846.—She is nursing a fine and healthy infant about four months old, and first observed the eruption about a week after her delivery, when it suddenly appeared in an acute form, and was attributed to cold. The pimples were at first of a bright red colour, but have now assumed a somewhat faded appearance. She thinks the disease is aggravated by heat and excitement of any kind. The eruption itches very much at times, particularly at night, materially disturbing her rest. She is a fine healthy female of large proportions, and somewhat *embonpoint*, but was never very strong. Except that she feels weak and exhausted from broken rest, she is in excellent health, showing no sign of "internal disorder," except the eruption itself. Pulse feeble, tongue clean, secretions natural. Five minims of Fowler's solution of arsenic were directed to be taken three times a-day, with or after the meals, and a quinine draught twice a-day between the meals.

Aug. 15th.—The conjunctivæ of both eyes are inflamed; the eruption is fading, and has become much less troublesome at night. The patient expresses herself as feeling stronger and in better spirits. Reduce the dose to four minims, and take the quinine once a-day.

Oct. 4th.—The patient has taken the arsenic for twelve successive weeks, the quinine occasionally, and an aperient when required. The conjunctivæ are still inflamed, and the dose of the arsenic has latterly been reduced to three minims. The eruption now gives her very little trouble; it has entirely vanished several times, but re appears occasionally in a trifling degree. I now lost sight of the patient for a time, but I afterwards learnt that she perfectly recovered.

Lichen frequently attacks the nose and face in delicate females, and then seldom yields without several months of persevering treatment. The exposure of the face to the open air, and the consequent variations of temperature, appear to aggravate the irritation of the skin.

Case 2.—*Chronic Lichen in the face, yielding to arsenical treatment continued for eleven months.*

Miss R., aged twenty-nine, a lady of delicate skin and fair complexion, tall and spare figure, weak and dyspeptic, had been much annoyed for several months by an eruption of red pimples on the face, forehead, nose, and lips. A few also appeared on the neck.

Dec. 8th, 1851.—The eruption is excessively irritable, and the health of the patient very delicate. The catamenial flow is profuse, and recurs every fortnight. The bowels are habitually costive, but at present she has an attack of diarrhœa. She complains of neuralgic pains in the waist, and general debility. Four scruples of sulphate of magnesia dissolved in infusion of roses were directed to be taken twice a-day, and ten grains of compound rhubarb pill every other night.

22nd.—Better in every respect. Continue the mixture once a day, and take five minims of Fowler's solution thrice a day in water.

Jan. 5th, 1852.—No improvement. Bowels uneasy and relaxed, tarsi and conjunctivæ swollen. Discontinue the drops, resume the rose mixture and pills.

14th.—Face worse, more papules. Health restored : tarsi well. Take five minims of the liquor arsenici chloridi thrice a day.

21st.—No improvement.

The health of this lady became very unsettled. The details of the case would be tedious, but she took arsenic with few intervals till the 9th of November, when the pimples and redness of the face and nose had *entirely disappeared*. She had also gained strength and flesh, and her health was excellent. I saw her about two years afterwards, and she had remained well.

In papulous eruptions I have met with various success in the use of cod-liver oil. Out of seven cases of lichen in which I have recently given it a fair trial, six appeared to receive no benefit; but in the seventh much good resulted from it.

CASE 3.—*Chronic lichen in a healthy female, cured by cod-liver oil.*

Jane W., aged 39, married; has been troubled with a dry papulous eruption on the front of the neck for two years, itching much. General health good, but the bowels costive. A tea-spoonful of the oil (Dr. de Jongh's) was ordered to be taken thrice a-day, with a gentle aperient if required. She took the oil regularly for three months, when the eruption was nearly well. Two peculiar circumstances were noticed in this case: the patient always perspired freely after taking the oil, and when she took it the disease was wholly relieved of the itching. She once or twice omitted to take it for a few days, and on each occasion the itching returned. The benefit has probably resulted from the diaphoresis.

PRURIGO is commonly a much more formidable disease than lichen. The unrelenting torment of the pruritus which always attends it, and the obstinacy with which, in the aged especially, it is said to resist

medical treatment, together with the distressing local complications which its presence often involves, constitute it one of the most deplorable afflictions to which the human frame is subject.

Diagnosis. It differs from lichen in the colour of the papulæ, which seldom present any shade of variation from that of the surrounding skin; they are likewise somewhat broader, less acuminated, and in some cases they scarcely rise above the surface of the skin. It is sometimes difficult to detect them, but having been torn by the nails, they are replaced by small black circular scabs, which are nothing more than minute drops of blood discharged from the papulæ and dried upon the surface. A number of scratches, and here and there a few yellowish-brown stains upon the skin where the papulæ have faded, are generally more or less distinguishable. The disease may either be general, or restricted to a confined locality, and in both forms may arise either from local or constitutional causes. The countenance of the patient is generally a sufficient indication of the existence of the disease. There is a wild, worried, fierce, despairing look. The torment has been known to terminate in insanity.

Treatment. Prurigo is certainly a curable disease in all its forms and complications. It exists in three conditions of the system; namely, healthy, inflammatory, anæmic. Arsenic is the remedy when the patient is otherwise apparently healthy. The inflammatory or febrile cases must be treated with free depletion at first, afterwards with arsenic. The anæmic require cod-liver oil, which often cures the disease: when it fails, the tincture of the sesqui-chloride of iron in combination with the chloride of arsenic will

often succeed. But the condition of the patient's health, and the indications suggested by the wasting, pallor, etc., must guide the practitioner. I shall first select for illustration two or three cases to which arsenical treatment seemed well adapted, and afterwards point out the circumstances which should prevent, or delay, or regulate it use. The subject of the following case I have never seen.

CASE 4.—*Prurigo Podicis, of Eight Years standing, cured by Arsenic: communicated by the Patient, a Surgeon in the Royal Navy.*

"A. B., aged 59, has been about eight years subject to pruritus, just within and around the sphincter ani: the attacks almost invariably commencing during the night, very frequently when asleep; and they have always been aggravated by cold ablution, or sitting in cold water before getting into bed. General health good, except a tendency to dyspepsia, which has generally been avoided by temperance and restriction to simple diet. There is some relaxation and thickening about the sphincter, most probably owing to the somewhat compulsory use of friction, as the only means of obtaining any sleep. There are no symptoms of local inflammation. Numerous local applications in the form of lotions, and ointments, have been tried without any good effect. A surgeon of very extensive experience in rectum diseases, attributed the complaint to ascarides, and prescribed ol. terebinth., of which several doses were taken; and they always procured a few days relief, though no worms of any kind have ever been voided.

"Feb. 23rd, 1846.—Having previously taken a dose of decoct. aloes. comp., the liquor arsenicalis was commenced (by the advice and under the direction of Mr. Hunt), in doses of five minims, thrice a day, in infusion of quassia, taken immediately after meals.

"March 8th.—Only two troublesome attacks during the past week: conjunctiva slightly and partially inflamed.

"27th.—Improvement gradual: no attack during the last five nights; but was seized with spasms of the intercostal muscles on the left side, followed by a pustular

eruption over the seat of pain,* which compelled me to omit the arsenic.

"May 20th.—The pruritus having returned about a week ago, I recommenced the liquor arsenicalis, m. v. ter in die, in cold boiled water.

"30th.—No attack for the last four days. Slight partial redness of the conjunctiva; bowels loose.

"July 11th.—The disorder, which has varied a good deal, is not much relieved; but there has been some degree of itching in the perineum and scrotum occasionally: no pruritus within the sphincter for the last week. The eyelids being very stiff and itchy, reduced the dose two minims in the day. From this date to about the middle of September, *had no attack*, but had then some pruritus *without* the sphincter."

The following extracts from the patient's letters will give the sequel of this very satisfactory case.

"Dec. 2nd.—I have continued the arsenic up to this day, with the occasional omission of a dose or two, from diarrhœa or catarrh; the daily quantity varying from thirteen to fifteen minims, according to the state of the eyes. I had no pruritus from the 4th of July till the middle of September, when I was attacked in the perineum and just without the sphincter, and have had several attacks since, with a papular eruption of a very ephemeral character, sometimes on the nates, at other times on the scrotum, &c., but I am quite free from eruption at present, as well as from pruritus. My stomach and bowels have not been in very good order during the summer, but the tendency to diarrhœa has been overcome by an infusion of pomegranate bark and quassia. I am now in very good health, but am frequently awoke during the night from dreaming that I am fighting or quarrelling with people, and find the heart beating very strong and quick, and it is frequently some time before it subsides. I have had no dyspepsia for a long time.

"Jan. 4th, 1847.—For the last month, I have had occasional but slight pruritus near the anus, but no affection within the sphincter, nor anything to disturb my rest. The medicine was at once reduced on the receipt of your

* Herpes zoster, probably.

note, to nine minims daily, at which rate I purpose continuing it. I have had no affection of the conjunctiva since reducing the dose, but I feel a stiffness and pricking in the eye-lids, almost every evening after taking the third dose, which is perhaps sufficient to show that it has effect on the system. I have had no unpleasant dreams since I reduced the medicine, and as I have made no alteration whatever in my diet or habits, it can scarcely be doubted that my former dreams were owing to the medicine. I have no doubt of my being cured of my annoying complaint. The medicine seems to have a beneficial effect on the skin generally: formerly the skin over my extremities, and especially over the thighs and nates, used to be very rough during the winter, but now the skin in those parts is perfectly smooth.

"Jan. 11th.—I am now so convinced of the complete power of arsenic over prurigo, that gratitude, as well as a strong desire to alleviate human suffering, would impel me to urge any persons similarly affected, to place themselves confidently under your care. You have my full permission to state that my name and address will be given to any medical gentleman who may wish to refer to me; and I shall be happy at any time to contribute my humble testimony *to the soundness of both your theory and practice.*"

In this case there was no inflammatory action, either general or local, consequently no necessity for depletion; the arsenic must be therefore regarded as the sole agent in the cure.

The following case is one of an opposite description. Arsenical treatment alone would have been of little or no service. The tendency to inflammatory action was so strong, that three weeks active depletion was necessary previously to commencing the arsenic; and, during the arsenical course, it was equally requisite to push the same system to an almost incredible extent.

CASE 5.—*Prurigo Formicans, general in extent and severe in character, subdued by active and repeated depletion, and ultimately cured by arsenic.*

Mrs. D———, aged 54, a person of small proportions,

temperate habits, and healthy constitution, was attacked in the year 1838, (at the age of 43) with apoplexy, terminating in temporary hemiplegia, from which she reports she speedily recovered under active blood-letting. In the year 1842 she had an attack of lepra alphoides, chiefly affecting the thighs, which yielded to aperients and arsenic. In 1845, a scaly disease attacked the toes, affecting two and destroying one of the nails. It was inflammatory, and was much relieved by the repeated application of leeches, but no healthy action appeared in the parts until the patient had taken a month's course of arsenic. In the spring of 1846, a distressing pruritus affecting various parts of the body, especially the extremities, began to annoy the patient, chiefly at night, but occasionally in the day-time. This was soon followed by an eruption of papulæ, some of which were of a pale red colour, others exactly of the colour of the skin, and though but slightly raised, more obvious to the touch than to the eye. The marks of the patient's nails, and small dark specks, were the most distinct objects; and except that the pimples appeared in the face as well as other parts, the disease might have been mistaken for the papular form of scabies, and was mistaken for it by the patient and her neighbours, who advised her to take large doses of sulphur internally. Under this treatment the disease soon assumed a far more aggravated form, which drove her, unwillingly, to seek my advice.

May 4th, 1846.—The papulæ are scattered in countless multitudes over every portion of the surface of the limbs, head, and trunk; not a vesicle or pustule can be detected. The left foot is affected with psoriasis, and the toes are very sore and swollen; she has occasional headaches, slight fever, and restless nights. Pulse 96, full; tongue clean; appetite unimpaired; bowels regular. Fourteen ounces of blood were drawn from the arm; but it was not buffy; a dose of calomel and colocynth was administered, and a saline mixture with nauseating doses of antimony every five hours. All stimulants were forbidden, and a strictly vegetable diet enjoined.

10th.—General health much improved; pulse 80, soft; pruritus less troublesome at night; no change in the appearance of the eruption. Continue the medicines and diet.

13th.—Pruritus less troublesome, but complains much of her left foot which is inflamed and scaly, the inflammation extending to the ankle joint. There is more fever. Six leeches to the left foot. Continue the medicine and diet.

27th.—The inflammatory symptoms, though not running very high, have been perpetually recurring. Leeches have been required several times, and it has been found necessary to restrict the patient to low diet, and to prescribe purgatives frequently. The papulæ are as numerous as ever, and the foot is still covered with scales; but there is much less of pruritus; the pulse is soft and quiet, the patient looks reduced and pale, and complains that she feels weak and languid. The arsenical treatment was now commenced:—five minims of Fowler's solution three times a day, with the meals, and an aperient occasionally. Animal food allowed in moderate quantity, but no stimulants.

June 10th.—The patient has taken the arsenic a fortnight. She expresses herself as entirely relieved of the pruritus; the papulæ are everywhere fading, being discernible only in the arms. The conjunctiva is inflamed, and the eye-lids puffy. Reduce the dose of arsenic to four minims.

12th.—The left foot is very troublesome, and appears inflamed and fissured. Blue pill and colocynth at night, and a senna draught in the morning. Continue the arsenic.

20th.—Foot much better, pruritus gone, papulæ scarcely visible, conjunctiva inflamed; patient complains of excessive debility, which is confirmed by her appearance and the state of the pulse. Continue the arsenic with an improved diet.

Up to this period the case confirms the truth of the principles already laid down, and might have been hastily reported as cured. But the cure of prurigo is no easy work; the arsenic had arrested the disease, but had not as yet destroyed the morbid tendency.

July 6th.—The improved diet has apparently been the source of increased activity in the circulation, and a consequent resuscitation of the disease. The pulse is frequent,

the skin hotter than natural, the papulæ much more numerous, prominent and irritable. The patient complains of prickling sensations, "worse than pain or itching, as if a thousand wasps were stinging her," and she passes her nights in almost insupportable torment; she despairs of getting relief from medicine, and thinks she shall go mad unless something can be applied to the skin to relieve her. (This is always the tone of patients suffering under the horrible anguish of pruriginous disease, but the result will show that there was no ground for despondency.) Nearly a pound of blood was taken from the arm, from which she felt herself immediately relieved. A full dose of colchicum was given every five hours, with a grain of tartarized antimony in each dose, and the arsenic continued as usual. The diet to be reduced as at first.

14th.—She has had one good night; the papulæ are vanishing and seldom itch; she feels very weak; the colchicum has much distressed the bowels. The dose of the colchicum was reduced, that of the antimony augmented, and the arsenic continued as before.

21st.—Arms again very troublesome, pulse frequent. Apply six leeches to the left arm, and persist in the use of the medicines.

27th.—Very little amendment. Persist in the medicines and add five grains of Plummer's pill every night.

August 3rd.—Pruritus very troublesome at night; pulse hard and frequent; papulæ more vivid and prominent, appearing here and there clustered in little hard knots. I now determined to bleed her *ad deliquium*. She fainted when about thirteen ounces of blood had been drawn, and *from this time there was a sudden and permanent improvement*. The pruritus was wholly subdued at once, and has never since returned *in a severe form*. Continue the medicine, excepting the Plummer's pill.

7th.—The patient appears quite well, but is extremely weak. The papulæ are scarcely visible, and there is no pruritus. Continue the arsenic, take a grain of quinine twice a day, and improve the diet.

27th.—Vascular reaction is again established, and with it the eruption and the pruritus have returned. Ten ounces of blood were taken from the arm before the pulse gave way; a purgative draught was ordered, and a reduced diet. The arsenic to be continued.

Sept. 7th.—Very much better, but much reduced in flesh and strength; conjunctiva very uncomfortable. Three minims of Fowler's solution thrice a day, and a little animal food allowed.

14th.—No decided alteration. Take five grains of Plummer's pill every night, and continue the arsenic.

Oct. 8th.—The patient thinks she has lived too well; some slight return of the pruritus; papulæ still visible; some of them enlarged, thickened, and turned of a dirt-brown colour, which is very general over the trunk. No fresh pimples have appeared for a month or more. Pulse full and hard, gums slightly tender. Eight ounces of blood were taken from the arm, and the arsenic and Plummer's pill directed to be continued steadily.

Nov. 4th.—Much better every way. Continue.

15th.—Skin hot, pulse full, some degree of pruritus. Eight ounces of blood abstracted.

18th.—Quite well. The arsenic to be continued for a time in reduced doses, and great care to be taken to moderate the diet.

February, 1847.—The patient continues well, and declares that she feels as strong and hearty as ever.

In little more than six months this patient had lost about seventy ounces of blood from the arm, and probably fifteen additional ounces by leeches. She had taken more colchicum, tartarized antimony, and purgative medicines, than I ever remember to have administered to a patient before, and once or twice her gums were tender from the mercury; yet in two months she feels as strong and hearty as ever. Can it be doubted that prurigo is sometimes expressive of a plethoric condition of the system? Nor is it less obvious, bearing in mind the previous attack of apoplexy, that detergent local applications would probably have placed the patient's life in extreme danger. Nothing but a determined adherence to one plan of treatment for months together, would have given this patient the slightest chance of recovery.

CASE 6.—*Prurigo Scroti, resisting the usual treatment for two years, and yielding to arsenic in a month.*

Mr. G——, a gentleman of healthy constitution, aged 30, had been under medical care for two years for the treatment of severe pruritus in the scrotum, verge of the anus, and contiguous parts; but the disease advanced in spite of the usual remedies recommended by Willan, Bateman, and other writers of more modern date, although administered by most respectable and intelligent practitioners, and with great perseverance. A few papulæ of the colour of the surrounding skin were visible, as well as the small black points characteristic of the disease. He placed himself under my care, on the recommendation of two of his medical friends.

April 14th, 1836.—He describes the pruritus as excessively severe, particularly at night. He complains of sensations of itching, burning, and stinging of a maddening kind. He finds no relief from rubbing, or scratching the parts; on the contrary, when he can no longer abstain from violence of this kind, it invariably aggravates his sufferings. He is almost a stranger to sleep, but though his mind is becoming irritable, his general health is not materially deranged. Pulse 80, full; functions unimpaired. Sixteen ounces of blood were taken from his arm, and the affected parts were bathed with hydrocyanic acid, largely diluted with tepid gruel.

15th.—The patient has had some sleep, and describes the itching as less intense. The blood is slightly buffed on the surface, but not cupped. He was put on a low diet; a dose of calomel and compound extract of colocynth was prescribed and a saline purgative night and morning.

16th.—The bowels have been fully relieved, but he is no better: he has been tossing about all night in unmitigated misery, and thinks he shall go mad or destroy himself. Pulse firm. Sixteen ounces of blood were abstracted from the arm, and a stong solution of nitrate of silver in laudanum, applied to the affected parts.

17th.—No relief. The caustic lotion has produced vesication in the scrotum, but the old torture continues. Blood not buffed. Five minims of solution of arsenic were ordered to be taken three times a day in a draught.

22nd.—No amendment. The dose of arsenic was increased to seven minims three times a day.

23rd.—He has procured some sleep by reposing in a hip-bath, his shoulders and head being supported by pillows. In this way he passed several successive nights in comparative composure, but the pruritus returns with its accustomed severity when he is not in the bath.

29th.—He is not essentially better, but fancies there is some mitigation of the heat. No evil effects appearing to arise from the arsenic, the dose was increased, at the earnest request of the patient, to eight minims.

May 1st.—He has now taken the arsenic for a fortnight. *The pruritus is nearly gone, and the conjunctiva is inflamed.* Reduce the dose of arsenic to five minims.

4th.—There is scarcely any pruritus remaining. The patient has taken aperients occasionally, and having lived on a vegetable diet, is reduced in strength, and his appetite is failing. Take of Fowler's solution of arsenic five minims, compound tincture of gentian half a drachm, distilled water, ten drachms: mix, make a draught to be taken three times a day.

7th.—Skin quite well: complains of indigestion. Take of mercury with chalk, three grains; aromatic confection sufficient to make a pill, to be taken every night. The arsenical draughts to be continued.

9th.—The health is improving and the eyes are not so weak, but the pruritus has returned in some degree. The dose of arsenic to be augmented to seven minims three times a day.

17th.—Pruritus gone. The conjunctiva is considerably inflamed, as also the mucous membrane of the nose, fauces, and bronchi, with catarrhal fever. The arsenic to be discontinued, and saline diaphoretics substituted.

18th.—Febrile symptoms abated: cough troublesome. Syrup of poppies and oxymel of squills were directed to be taken in small doses to relieve the cough.

22nd.—Better, but weak. Sulphate of magnesia with infusion of roses twice a day.

24th.—Quite well. No pruritus.

On the following day the patient returned home; I saw him ten months subsequently. He had experienced no return of the pruritus except in a very trifling degree, for a short time only. He assured me that I should hear from him in case of a relapse: but it is now twenty years since I had any tidings of him.

At the period at which this case was under treatment, I was not aware of the advantage derivable from mixing the arsenic with the food, by which expedient it more readily gets into the circulation, *arrests the disease in smaller doses, and more speedily*, and is far less likely to distress the mucous membranes. Neither was I then alive to the importance of beginning with the large dose, and gradually decreasing it. I am decidedly of opinion that so large a dose as seven or eight minims, is seldom necessary in the treatment of cutaneous disease. One thing at least is demonstrated by the case, that the arsenic controlled, and finally cured, the pruriginous disorder. The catarrh was probably endemic.

By far the most distressing form of this tormenting disease is unquestionably that which attacks the female organs of generation in advanced life. It is needless to expound at large the miseries which accompany this horrible affection. Not the least among them is the despair of obtaining relief which accompanies the disease. Of the entire recovery of a patient thus afflicted, or even of considerable alleviation of suffering, not one single gleam of hope can be gathered from any author who has written on the subject. And yet there is no truth in the whole circle of medical science more vividly impressed on my own mind, than that, under proper management, arsenic is an effectual remedy for this disease. I will relate one or two cases, which appear to me decisive; but not more so than many others, which I suppress for want of space.

CASE 7.—*Prurigo Pudendi Muliebris in an aged female, checked by arsenic.*

Mrs. S., a lady advanced in life, (probably seventy,) of

short stature, moderately stout, and enjoying excellent general health, had been under treatment for about three years for an intense pruritic affection of the external genitals, extending to the mucous lining of the vagina, and making life a burden to her. Leeches had been twice applied to the vulva with doubtful benefit, and various other remedies had been tried : but though she had experienced temporary relief from lotions, the disorder had gradually and steadily advanced.

Sept. 22nd, 1845.—The disease is now more troublesome than ever : she is excluded from society, and prays for death. There is an intense and unappeasable pruritus in the labia, nymphæ, and meatus, extending throughout the whole course of the vagina, assuming a more aggravated character soon after she lies down in bed, and continuing during the greater part of the night. During the day it torments her in a more moderate degree, and she has intervals of relief. There is some tumefaction in the affected parts, probably the result of friction, from which it is impossible for her to abstain. There is no discharge, nor are there any visible papulæ : but there are two or three patches on the trunk in a state of scurfy incrustation, which were probably papulous in their origin. The pulse is quiet and weak, the skin cool, and the bowels regular. She was ordered to take a nourishing diet, and with each meal, three times a day, five minims of Fowler's solution of arsenic.

24th.—She is suffering from a severe attack of gastric spasms, with vomiting, which she attributes to some sour grapes she had eaten on the 23rd. The arsenic was discontinued, and suitable remedies having been successfully administered, it was resumed on the 27th, and continued steadily for a fortnight without producing any sensible effect.

Oct. 14th.—She now complains that her eyes are exceedingly weak, and supposes she has taken cold ; but she has no catarrhal affection. *The lower eyelids are puffed and swollen, the conjunctiva reddened, and the tears ready to start.* She has had no return of the spasms, or vomiting. In answer to inquiries respecting the pruritic symptoms, she replied for the first time, and with emphasis,—"*Better, certainly better ; I have had two or three heavenly nights.*" She was now called to a distance on urgent business, and

departed on the following day, promising to return for further treatment, if she should have any relapse of her malady, and I have not heard of her since that time.

The pruritus in this case had produced an irritability of temper bordering on mania, and very foreign to her prevailing disposition, which was described by her attendants as mild and amiable. It was gratifying to observe how placid and cheerful she became when she got rid of her annoying complaint. She took her leave of me in high spirits, and considered herself well.

CASE 8.—*Prurigo, general and local, of a fearfully tormenting character, cured by arsenic.*

Mrs. M., aged 74, had been suffering from general prurigo for eighteen months, and most acutely in the pudenda. Her health was tolerably good, but she had wasted much, and there was some heat of skin. She requested my attendance.

March 10th, 1855.—When her condition was as above described, for the first fortnight she took some gentle aperients and salines and then commenced a course of arsenic, the average dose being ten minims of the liquor arsenici chloridi ter in die.

May 26th.—She has now taken the arsenic about ten weeks and is *perfectly well.* During the last ten days she has not been sensible of any irritation in the skin, nor especially in the parts where she had suffered most acutely.

The arsenical treatment is effective in those cases of prurigo only, in which there is neither any obvious disorder of the general health, nor any incidental palpable cause for the local affection. The prurigo podicis is occasionally produced from the irritation of ascarides in the rectum; the pruritus pudendi, from pregnancy or uterine disease; the pruritus of the meatus urinarius, from stone in the bladder; the pruritus nasi, from lumbrici in the intestines, or irritation in the bowels from other causes: all which cases, and many others

which need not be enumerated, must, of course, be treated by curative measures directed to the removal of their respective causes.

Independently of local causes, pruritus is found to exist in two very different and opposite states of the system. Examples of the sthenic forms have been given. The asthenic forms, or those associated with anæmia or a strumous habit, are very greatly benefited by cod-liver oil, both as an adjunct to arsenic, and as a leading remedy when arsenic is inadmissible.

CASE 9.—*Prurigo Formicans of asthenic character in a young woman, cured by cod-liver oil.*

M. W., aged 21, single, presented herself at the Dispensary, March 27, 1855, complaining of a "dreadful itching" all over the body, which had tormented her most cruelly for four years. Her back, bosom, arms, legs, thighs, and abdomen were covered with innumerable pimples of the colour of the skin, and the surface was literally torn into sores by the patient's nails. She described the irritation as like the stinging of ants, and she says she has often been kept awake the whole of the night. She complained of feeling extremely weak and exhausted, the appetite was ravenous, bowels constipated, catamenia regular. She was otherwise in good condition. Purgatives were first administered, and with them the solution of chloride of arsenic in doses of fifteen minims three times a-day. After eleven weeks' persevering trial of this plan, there was but a very trifling improvement in the disease, and, as she complained of cough and tightness in the throat and chest, it was thought prudent to stop. She now took the cod-liver oil in the usual doses, and in about seven weeks there was scarcely a papule to be seen; the irritation had entirely subsided, and her health proportionably improved. She had gained flesh, and her appetite was no longer ravenous. She now laid aside the oil only for a few days, and the cutaneous irritation returned, but again subsided on resuming the same dose, a tea-spoonful only, thrice a-day.

CASE 10.—*Prurigo Formicans in a married woman, of five years' duration, cured in five weeks by cod-liver oil.*

M. T., married, aged 58, applied for relief, August 24, 1855, complaining of intolerable irritation over the whole surface of the body, which was covered with minute truncated papulæ very little redder than the skin, which was much lacerated by the finger nails. The catamenia had ceased for ten years, and the disease had tormented her for five years.

August 24, 1855.—*She is weak and thin*, and the bowels are regular. The irritation in the skin is always aggravated by purgative medicines. Fowler's solution of arsenic, (a remedy which but rarely fails in this disease,) was prescribed in doses of five minims thrice a-day immediately after a meal.

31st.—No better. Continue the arsenic and take a gentle purgative.

September 4.—The patient is feverish, and suffering from an acute attack of urticaria. Liq. ammon. acetat., and pil. rhœi comp.

14th.—She is much better in health, but the pruritus is very tormenting. A teaspoonful of Dr. De Jongh's cod-liver oil thrice a-day. Pil. rhœi comp. alt. noct.

18th.—Skin very much better. Continue the oil.

25th.—Still improving—slightly dyspeptic. Continue.

October 2.—Mending fast. Dyspepsia better. Continue.

19th.—Scarcely any irritation in the skin. Continue the oil for a month.

CHAPTER III.

ORDER II.—SQUAMÆ.

"SQUAMA, *scale : a lamina of morbid cuticle, hard, thickened, whitish, and opaque.*" (Willan.)

These laminæ, though thicker than the natural cuticle, are thin, compared with the incrustations formed by the drying of serous, or sero-purulent discharges; from which they are also distinguished by their whitish or silvery appearance. They are not transparent, like mica, but they frequently resemble it in surface and colour. They are constantly being separated by desquamation, and leave a reddened, smooth, and glistening surface underneath, so long as the disease is advancing: when it declines, this subjacent surface becomes covered with healthy cuticle.

Under this order, Willan has included four diseases; namely, *Lepra*, *Psoriasis*, *Pityriasis*, and *Ichthyosis*.

The terms, "lepra" and "psoriasis" are but two names for one and the same disease, differing only in the forms of the scaly patches.

If the original laminæ happen to arrange themselves in a rounded form, or at considerable distances from each other, the disease extends (by proximity of parts) around the circumference, and as the central parts become, by aggregation of laminæ, first white and

friable, and then (healing) apparently flattened, the circumference, exhibiting newly formed papulæ, appears like an inflamed and elevated ring. Here we have a case of *lepra vulgaris*, which may spread to a large extent. It commonly commences in clusters of points widely separated from each other, which, forming continuous crusts, gradually extend until they touch, and form a patch of very large extent irregularly rounded. Lepra vulgaris attacks the arms, legs, and trunk, seldom the hands or feet, still more rarely the face. If the papulæ happen to appear primarily in very small clusters, precisely the same process produces at the outset the appearance called *lepra alphoides*, so named from the whiteness of the scales. This form of the disease occurs chiefly in children and in persons of delicate organisation; and shows itself on the limbs, particularly at the elbows and knees. At length, by mere extension, it may assume the form of *psoriasis diffusa*, which consists simply of small leprous patches irregularly confluent, losing their circular appearance in the multiplicity of the points of contact between the original patches. As some of these surfaces heal, the more recently affected portions of skin sometimes assume a convoluted, serpentine, or grotesque appearance (*psoriasis gyrata*). The different degrees of extent and severity to which squamous diseases are subject, have suggested their division into two more varieties, viz., *psoriasis guttata*, applied to patches in which the disease, in its earliest stage, appears like pearly drops on the skin, rather elevated than depressed in the centre (the healing process not having commenced), and the *psoriasis inveterata*, by which very significant term the disease is described in its last and

worst form. Here the scales have increased in extent until they have covered almost the whole body; the face, the palms of the hands, and soles of the feet, generally escaping. This increase in extent is usually accompanied by a proportionate increase in thickness, by which the scales form a hard cracking crust over the whole body, the fissures extending into the inflamed skin beneath, and forming raw and sore chaps, gaping, red, and bleeding; sometimes discharging a serum, which cakes on the surface and aggravates the sufferings of the patient, whose bed, as he rises from it in the morning, is filled with scales, handfuls of which may be collected. He is distressed with a perpetual itching, burning, and smarting, and, at length, by broken rest and suspension of the functions of the skin, his health is destroyed, and the disease may possibly prove fatal. The disease is also named psoriasis inveterata whenever it is severe in character, although not extending over a large surface. The variety of colour in the scales has given a name, not only to the species called lepra alphoides, but to another, in which the inflamed portions of skin are of a livid colour, and the scales themselves nearly black (*lepra nigricans*). As the precise colour of the scales and surrounding integuments will, in every case, depend partly upon the activity and energy of the circulation, and partly on the complexion of the patient, the livid scales of the lepra nigricans indicate rather an accidental condition, than a natural distinction. Not so, however, the term *lepra syphilitica*, a named applied by Willan to a scaly disease of syphilitic origin, presenting a copper-coloured appearance. This is, indeed, an important distinction, and one which should not escape notice.

That squamous diseases are not of local origin is satisfactorily demonstrated by the universal failure of topical remedies, when relied on alone for their permanent cure. And in confirmation of the truth of this theory, it may be observed, that it is out of the power of any local causes to produce the diseases properly included in this category. Lastly, I have ascertained, by a long course of experiments, that the *true squamosæ are all susceptible of cure, without any external application whatever*. Even baths of every kind (however desirable for purposes of cleanliness and comfort) are by no means essential to the destruction of the disease.

The milder forms both of lepra and psoriasis ar constantly presenting themselves to our notice, uncomplicated with any obvious disturbance of the general health: but the functions of the skin are of so much importance in the economy of the health, that it is difficult to conceive of a disease, spreading so extensively as to cover nearly the whole surface of the skin, without affecting the general health. Now, the patches of lepra vulgaris, even in its more severe forms, advancing slowly on the circumference, and meanwhile healing from the centre, generally leave large portions of the skin in a healthy state, and thus the functions of the skin are not materially impaired. But in psoriasis inveterata, in which almost the whole surface becomes a continuous mass of disease, it is natural to suppose that the health will suffer more severely; and this may have given rise to the notion adopted by Willan that lepra was a local, and psoriasis a constitutional affection.

That the squamous diseases of the skin (except when of syphilitic origin) are essentially of an *inflam-*

matory nature, is the next important point which I propose to discuss.

1. The primary appearance of the disease has all the common characters of inflammation, viz., heat, redness, pain, and throbbing. When the disorder is of a mild character the pain is little more than a sort of smarting itch, and the throbbing scarcely perceptible; but in aggravated cases, there is severe pain and a sensible throb. 2. There are often general indications of inflammatory fever, such as a quick, hard pulse, alternate chills and heats, headache, suppressed secretions, etc. 3. Where the disease is extensive and violent, it is not only relieved by bleeding and the antiphlogistic regimen, but the blood drawn generally exhibits the inflammatory crust, and is sometimes strongly cupped and buffed. 4. The complaint will sometimes yield for a time to bleeding or leeches alone; but then its return must be prevented by cautiously reducing the diet, and by a course of alteratives.

If these representations are founded in fact, and they are confirmed by recent authorities, we can easily account for the difficulty which Dr. Willan and others encountered in subduing these complaints. Dr. Willan speaks of lepra as arising from a "languid circulation"; he describes the pulse as "feeble and languid, or irregular." Dr. Bateman also uses the term "languid circulation," and Mr. Plumbe speaks of "a deficient energy in the vessels of the part." All these writers use the word "inflammation," but it is plain they did not regard it as likely to be acute in its character, or of sufficient importance in any case of lepra to require active treatment. At the same time it is not denied that

both forms of the disease sometimes occur in feeble or aged persons in a subdued or subacute type.

Treatment. A minute detail of the multitudinous methods which have been propounded for the treatment of this simple complaint, would cast but little light on its therapeutics. Their very number is signally appalling and discouraging. The Greek physicians (like too many of the moderns) trusted chiefly to external applications: among them we read of alum, sulphur, nitre, elm bark, goat's dung, viper's flesh, urine, hellebore, colophony, mustard, horse-radish, quicklime, vitriol, *cum multis aliis*. And the moderns are scarcely behind them in the length of their list of topical remedies: turpentine, lime-water, liquor potassæ, blisters, decoctions of bran or oatmeal, elm and oak bark, hydrocyanic acid, nitrate of silver, ointments composed of tar, sulphur, oxyd of zinc, and the various salts of mercury; mercurial and sulphur fumigations, friction, warm bathing, vapour baths, warm air baths and sea bathing, may be mentioned as samples; and among the internal remedies may be enumerated sulphur, antimonials, nitre, decoctions of the woods, galium, urtica, the mineral acids, tar, sulphuret of potash, cantharides, Plummer's pill, arsenic, and a still longer list of purgatives and tonics. Notwithstanding this array of remedies, there are few disorders to which the human frame is subject the treatment of which has reflected less credit upon the art of healing, than these chronic diseases of the skin. In too many cases, even of modern date, medical treatment has proved wholly useless. In others, local applications, combined or not with internal remedies, have so far been successful in modifying the diseased action as to

effect the temporary disappearance of the scales. In some of these cases, the "cure" has been published, and the plan of treatment adopted by others; meanwhile the patient suffers a relapse, is "cured" a second time, and again relapses. The disease was thought to be extinct, but there it is, probably in an aggravated condition, a visible, perpetual reproach to medical science, and an annoyance or torment to the patient, who, having gone the round of "the faculty," is ordered to Bath, or Leamington, or Harrogate, only to reap further disappointment.

All the best writers on the skin have, until very recently, spoken of these complaints as "refractory, obstinate, and unmanageable," and "notoriously rebellious to all the modes of treatment usually recommended." And yet a disease, simple and uniform in its character, seldom fatal, never malignant, always susceptible of mitigation or control, and generally easy of cure, ought to prove more tractable than it is found to be. Why have we so frequently failed? There are three sources, to which may be traced a large share of unsuccessful practice, all of which have, more or less, contributed to our disappointment. *Firstly*, we have too frequently forgotten or overlooked the important fact, that we have to deal primarily with an *inflammatory* disease, in some cases of wide extent. *Secondly*, we have been too much in the habit of treating the complaint *locally*, and thus masking it, and depriving ourselves of the only means presented to us of ascertaining the progressive effects of internal remedies, on which alone we must ultimately rely for a permanent cure. *Thirdly*, in the selection and use of these internal remedies, not always considering well

what we propose to do by them, we have not acted with sufficient method, or system, or perseverance, or determination, but have been content with trying, consecutively and carelessly, a variety of remedial agents, rather than relying with confidence on any one of them. A medicine fails as certainly when the mode of administration is *mal-a-propos* or defective, as when it is intrinsically inert. Under such disadvantages as these, many other diseases would probably prove intractable, which are, in fact, very manageable under a more enlightened method of treatment; and it is my firm conviction, that the disorders under review, except when complicated with organic disease, *will invariably yield to nicely managed treatment.*

One serious difficulty, with which we have occasionally to contend, is to induce the patient to persevere for a sufficient length of time in the use of remedies. And as we cannot expect to inspire *him* with confidence unless we possess it *ourselves,* the first step towards the cure is to determine that it shall be accomplished; and the second to assure the patient of a perfect, but not rapid recovery. The time required for this purpose I have found to be very uncertain, depending very much upon the date and duration of the disease, and upon the constitution of the patient.

All the different varieties of lepra and psoriasis, which are idiopathic (*i.e.* not syphilitic), will yield to small doses of arsenic continued for months together, and preceded or accompanied either by such an amount of depletion, and the adoption of such antiphlogistic measures as the case may require, or, by giving the requisite tone to the system where there is marked debility. I shall illustrate this position by

selecting from my note-book several cases of scaly disease, some of which may be denominated lepra, and others psoriasis.* No two of them were treated precisely alike, because the variations of constitution and other circumstances required a corresponding variety in the adaptation of remedies.

CASES OF LEPRA. The following cases of lepra are selected for the special purpose of demonstrating several important principles which have been already laid down:—

CASE 11.—*Lepra Vulgaris of the sthenic type, exhibiting the necessity of bleeding and low diet; and the efficacy of arsenic in the final cure.*

Mr. N., aged 52, a gentleman of plethoric habit, and ruddy complexion, having naturally irritable bowels, became the subject of lepra vulgaris, about the year 1839. The disease commenced in the spine of the left scapula, extending downwards towards the hip; it then attacked the hairy scalp, and travelled over almost every region of the body except the face. The disorder continued to make advances for several years, in spite of various treatment. The patient had taken mercury, cantharides, iodine, tar, and even arsenic for a long time without advantage. Externally, tar and other ointments, lunar caustic in solution and in substance, and vapour and sulphur baths had been successively tried without any marked or permanent benefit. He had been kept on low diet until he had lost flesh and spirits, and found his general health failing. The bowels had become excessively irritable, and the whole case wore a very discouraging aspect. He accidentally came under my care.

July 6th, 1844.—The disease has now existed nearly five years. The scalp is almost covered with leprous scales, which annoy him greatly, and itch very much at times. One of the patches extends to the forehead, and terminates just below the margin of the hair: the ears are also slightly affected. One well-marked patch on the back, commencing at the left scapula, and extending ten inches downwards, measures about thirty in circumference. It is nearly cir-

* When the patches are round and distinct, and depressed in the centre, I call it *lepra*; when not distinctly circumscribed, then *psoriasis*.

cular, surrounded by an elevated inflamed ring, which encloses a surface apparently depressed, and covered by almost continuous layers of laminated micacious scales, which desquamating, disclose underneath a red glistening surface, on which a thin, newly-formed scale is visible. There are several smaller patches of various dimensions, from the size of a dollar to that of a split pea, on the hips, buttocks, elbows, knees, clavicles, groins, and wrists: even the scrotum and the preputium are covered with scales; and *several of the finger nails are morbidly and irregularly secreted.** The disease is attended with almost constant itching in one part or another, which deprives the patient of rest. He is reduced in flesh and strength, his bowels are constantly much relaxed, and his tongue is foul. Five minims of Fowler's solution of arsenic was ordered to be taken thrice a-day, mingled with the usual beverage at meals.

July 9th.—No improvement. Pulse 90; skin hotter than natural. He complains of thirst and feverishness; has a great dread of bleeding, and requests a few days' trial of other remedies. A dose of cathartic pills was administered, a saline effervescing draught at intervals, and the arsenic continued.

10th.—Cooler and better. The salines and arsenical solution were continued till the

25th. No improvement during the last week. He now consented to lose blood, and sixteen ounces were taken from the arm. It was neither cupped nor buffed. The arsenic was persevered in until the

29th.—Much better; skin cool and less irritable, pulse quiet; tongue improved, bowels less relaxed; leprous patches for the most part exhibiting a faded appearance. Conjunctiva inflamed, lower eyelids swollen and puffy. He complains that his eyes itch, and are weak. Reduce the dose of arsenic to four minims thrice a-day.

Aug. 19th.—The squamous affection is rapidly declining. The eyes are still tender, and the skin is hot. Dose of aperient pills, and a saline mixture. Reduce the dose of arsenic to three minims thrice a-day.

Sept. 23rd.—He has persevered with the reduced dose of arsenic until now. No external application has been used,

* This affection of the nails is exceedingly common, and sometimes occurs as the *only* symptom of lepra.

except a little white precipitate ointment to the scalp. His eyes are still "weak," but not worse than they were. *All the leprous patches are smooth and denuded of scales.* They have healed from the centre, which is now of the natural colour of the skin: the elevated rings have become even with the skin, and exhibit a dullish-red or faded appearance. I recommended him to persist in small doses of the arsenic for several months, under the eye of his usual medical attendant; but he considered himself perfectly well, and acted on this advice but partially. In the spring of the following year, the disease returned, and threatened to become as virulent and extensive as before. He consulted me again,

April 27th, 1845.—The disease has returned on the scalp, the back, and other places where it had previously appeared. His pulse is full and quick, and the surface is hot. He has gained flesh and strength. He was now forbidden all fermented liquors: a dose of cathartic pills, and some saline aperients were ordered, and the full dose of arsenic was resumed, viz., five minims of Fowler's solution three times a-day.

July 16th.—He has fluctuated a good deal, but the disease has again entirely disappeared. He is to persevere in small doses of the arsenical solution, and still to avoid fermented liquors; as every past indulgence, even in moderation, has created flesh irritation in the skin. *His bowels are much less irritable.*

Aug. 11th.—He has had no return of the scaly disease. but the skin is beginning to assume an angry and suspicious appearance in the locality previously affected. He has met with an old friend with whom he has "drawn a cork." The conjunctiva is much inflamed, and he complains of pain in the orbits. Eight leeches were applied to the temples. Cathartics were administered, and low diet strictly enjoined. The arsenic to be continued.

Aug. 30th.—General health much improved, but small thin scales have succeeded the redness of the past week. Eight leeches to the temples. Continue the arsenic.

Sept. 22nd.—Quite well; no diarrhœa. The arsenic to be continued in doses of four minims, reduced to three when the state of the conjunctiva shall indicate the propriety of it.

Nov. 27th.—He reports by letter that "there is no return of the disease of the skin," and that he is persevering with the arsenic without inconvenience.

In this case, it is worthy of notice, that the arsenic was useless until venesection had been resorted to; that the irritable mucous membrane of the bowels was rather soothed than excited by the arsenic, and *recovered its tone when the skin was restored to health:* and lastly, that neither bleeding alone, nor dieting alone, nor arsenic alone, nor any two of them together, but an adaptation of the three remedies to the varying exigences of the case, subdued the disease; which has, however, once or twice shown a disposition to return whenever the patient has indulged in wine or good living. In these cases there is but one way of purchasing immunity from the disease, and that is—adopting a scale of diet suited to the wants of the constitution; anything beyond this produces disease. In two or three cases the adoption of an exclusively vegetable diet has proved necessary.

In the selection of alterative remedies for these disorders, empirical principles are unfortunately too apt to guide the practitioner; and even to this day the "trial" of one remedy after another, without any definite plan or design, is formally sanctioned by respected authorities. This unscientific mode of procedure is, in fact, no more to be justified in the treatment of cutaneous, than of visceral disease. Nay, if any maladies require, more than others, an intelligent and judicious application of the established principles of therapeutics, these are the very diseases; inasmuch as they rarely happen to yield to the treatment suggested by habits of careless and indiscriminate routine. The simple treatment required in the following case stands in striking contrast with that of the preceding; yet they were both well-marked cases of lepra vulgaris.

CASE 12.—*Lepra Vulgaris of many years standing, cured by small doses of arsenic, without depletion.*

Mrs. M., aged twenty-five, a lady of clear complexion, nervous temperament, and excellent general health, the mother of three children, has been constantly afflicted with a scaly disease of the skin, more or less severely, since she was about six or seven years of age. She has been subjected to various treatment without advantage, and has been given to understand that the disorder is incurable. She consulted me

June 26th, 1845.—She is nursing her third child, and is in good general health. She is somewhat embonpoint, but not plethoric. On the arms and legs are several broad and nearly circular patches of various sizes, each being circumscribed by an elevated ring of a pallid, reddish hue, not showing any great vascularity. The patches are covered by laminæ of thin silvery-white scales, which are frequently dropping off, disclosing underneath, either a recently formed scale still adhering to the cutis, or a clear surface, of the colour of the outward ring. One of these patches occupies two-thirds of the left leg, beginning at the knee and extending nearly to the ankle, covering the whole front of the leg, and nearly meeting in the calf. The patches are likewise scattered more or less thinly over the whole body, the face and neck only excepted.

The area of these patches does not appear so much depressed as is usual in lepra; but the reason of this is, that the ring is less raised and inflamed than when the disease occurs in a plethoric habit, or in a more acute form. There is no smarting or itching, no fever or heat of skin, no acceleration of the pulse. It is a peculiarity of this lady's system, to menstruate regularly and freely during the period of lactation. She was directed to take five minims of Fowler's solution of arsenic three times a-day with her meals, and to make no change in her diet.

July 12th.—She complains of the eyes being "weak:" the conjunctiva is slightly inflamed; the patches are everywhere fading, the scales dropping off and disclosing sound smooth cuticle underneath. A spot which I had noticed on the bosom, in an incipient state, is certainly disappearing, instead of spreading in the usual way. The dose of arsenic was reduced from five minims to four, thrice a-day, as before.

30th.—Scarcely a vestige of lepra remains, the scales having wholly disappeared; but there is a dullish brown discoloration of the cuticle, showing their previous locality. To continue the arsenic steadily.

Aug. 19th.—In consequence of the anxiety and fatigue atttendant upon nursing a sick and dying child, she has neglected her medicine for two or three weeks; and the leprous patches are re-appearing in all their original positions. It is more usual in relapses, for the disease to attack those portions of the skin previously affected, than to select a new locality. Ordered to resume the arsenic.

Oct. 3rd.—She has taken the medicine steadily for six weeks, with a result exactly similar to that of the first experiment. The disease has again vanished, and she has experienced no inconvenience whatever from the arsenic, except a very trifling affection of the conjunctiva.

This case was remarkably favourable to the exhibition of arsenic. In the following, on the contrary, unusual difficulties presented themselves, which would generally have been reckoned decidedly interdictory of the use of the medicine altogether. Nevertheless arsenic cured the disease, not only without inflicting any injury, but apparently conferring benefit on the constitution.

CASE 13.—*Lepra Alphoides in a delicate female, yielding to very minute doses of arsenic.*

Miss D., a middle-aged lady, who had been a valetudinarian for twenty years, has recently been the subject of a scaly eruption, appearing in small round spots distributed about the arms and legs. The central portions of these spots are covered by very white scales, the circumference being scarcely distinguishable in point of colour, and very slightly raised. The disease gives her no trouble, but is gradually increasing. She first called my attention to this disease,

Dec. 28, 1843.—The spots are of various dimensions, never exceeding that of a silver fourpenny piece. The scales are easily rubbed off, and the skin which underlies them is of a pale rose colour, and more lustrous than natural. There is no fever, the pulse is slow and weak, and the bowels

regular. The general health, which has been frequently deranged, is as well as usual. This lady has always been unusually susceptible of the action of potent medicines, particularly of the mineral class. Half a grain of the hydrargyrum cum cretâ, produces as much effect as ten grains of blue pill on subjects of average strength. Nevertheless, I commenced the attack on this disease, with five minims of Fowler's solution of arsenic, three times a-day.

31st.—She has taken the medicine only three days, and complains of excessive weakness in the eyes, sensations of smarting, itching, and pricking in the eyelids, and a copious secretion of tears. There is likewise occasionally a general tremor of the limbs. The dose was reduced to two minims.

Jan. 4th, 1844.—The conjunctiva is still inflamed, and the nervous system very irritable. The dose was reduced to one minim.

10th.—Conjunctiva still slightly inflamed. The scaly eruption is fading fast. Continue the arsenic in doses of one minim.

16th.—The eruption has generally vanished, and there are no fresh spots visible. The patient is nervous and fanciful, and begs to be allowed to discontinue the medicine, (which she knows is arsenical,) having heard strange reports of its dangerous character as a medicine. Request granted.

30th.—The skin is quite healthy. No ill effects have resulted from the medicine.

July 9th.—She has had a return of the eruption in a very slight degree, which yielded to *half a minim* of the solution thrice a-day for *one* week. The whole quantity taken for the cure of this last attack, amounted to ten minims of Fowler's solution, or the twelfth of a grain of arsenious acid, the dose being about the two hundred and fortieth of a grain.

Feb. 3rd, 1845.—The eruption has made its appearance a third time, complicated with neuralgia of the facial nerves, to which the patient has long been subject. Two minims and a half of the solution of arsenic thrice a-day, and an opiate at night.

Feb. 10th.—Conjunctivitis. Reduce the dose to *one minim.*

15th.—Conjunctivitis no better, rather worse. Reduce the dose to *half a minim.*

20th.—The conjunctiva is still very troublesome. Reduce the dose to a *quarter of a minim.* This extremely minute dose (only the four hundred and eightieth of a grain of white oxide of arsenic) was taken thrice a-day for a month, at the end of which period, the *neuralgia was much better, and the lepra had entirely disappeared, nor has it since relapsed.**

There are in the profession, men of sceptical minds, who will scarcely believe in the efficacy of such minute doses. I prefer, however, the alternative of believing it, and leave to the sceptic the more difficult task of explaining, on the other alternative, how it was that the disease returned *twice*, after the patient had relinquished the medicine upon the disappearance of the disease, and did *not* relapse after the perseverance in this small dose for a month? There is no one fact in medicine which to my own mind is more perfectly well demonstrated than the uniform control exercised by small doses of arsenic over idiopathic squamous diseases, unattended by fever; and certainly there is no rule for the dose, but its effects on the conjunctiva and on the disease. Some patients require ten times more than others; and the same patient at different times, for reasons I cannot divine, is found susceptible of the influence of arsenic in widely different degrees.

It is worthy of remark, that the subject of the above case has enjoyed better general health since her seven weeks course of arsenic, than she had experienced for the previous eighteen or twenty years; and has been especially free from neuralgia. Nor is there any way of accounting for the improvement, but by attributing

* A homœopathic writer, who must have known better, has charged the author with administering homœopathic doses in this case: but these doses are as far removed from infinitesimal doses, as the waters of the Atlantic from a single drop of water.

it to this medicine. And yet this lady's system showed such a remarkable repugnance to the poison, and she was so weak and nervous, that according to prevailing views, it ought not to have been prescribed for her at all. She was subject to attacks of hæmorrhage from the bowels, neuralgia in the face, chest, and uterus; hemorrhoids, hepatic derangement, nervous headaches, etc., etc., from all which maladies she has been remarkably exempt since the arsenical course was administered.

I add one more case of lepra to show that the arsenical treatment may destroy the tendency to the disease.

CASE 11.—*Lepra Alphoides, following small-pox, permanently cured by arsenic.*

A country girl, aged seventeen, having passed through a moderately severe attack of small-pox, perceived, about two months subsequently, an eruption of spots about the size of a split pea, none of them being larger than a sixpence, covered with small white silvery scales desquamating very freely. They were numerous over the whole trunk and extremities, the head and face only escaping. The arsenical solution was administered in the usual way, and in about three months the eruption had disappeared. I then lost sight of the case, and have taken no notes of it; but a few weeks since I saw the patient, who is now married and has a family. She assured me that she had perfectly recovered, and that she had had no return whatever of the disease. About ten or twelve years must have elapsed since she was under treatment.

This is only one out of a large number of cases in which I have every reason to believe that the disease is permanently cured.

CASES OF PSORIASIS. It has already been explained that lepra and psoriasis are one and the same disease;

the difference in the mere figure of the eruption being apparently accidental.. Accordingly they both require the same kind of treatment; depletion and low regimen when there is fever or active inflammation; cod-liver oil and tonics when there is a defect of nutrition; arsenical treatment when there is nothing obviously wrong but the disease itself. I shall select three cases as illustrative of the adaptation of this treatment to three varieties of the disease. The first is a case of *psoriasis diffusa*, which followed an attack of erysipelas, in an irritable subject. In this case the soothing influence of arsenic is well exemplified. The second is a truly horrible case of *psoriasis inveterata*, of very long standing, scarcely relieved by mercurials, purgatives, and low diet, but fully and finally cured by arsenic. The third is a case of *psoriasis guttata*, affecting the patient during the period of lactation—but even under these circumstances, yielding to arsenic; a result which I confess at first surprised me. Two or three other cases will be added to exemplify other varieties of the disease, and their treatment.

CASE 12.—*Psoriasis Diffusa, supervening on the decline of erysipelas, rebellious to various treatment, but yielding at length to small doses of arsenic.*

Mrs. Y., aged fifty, a lady of sanguine and irritable temperament, was attacked with erysipelas in the face, in the month of February 1833. The disease was moderately severe, and affected in turn the face, ears, and head, taking the usual course of the disease, and terminating in resolution at the end of ten or twelve days. About two months subsequently,

Aug. 12th, 1833,—A red patch appeared on the left ear, extending thence downwards to the neck, which speedily became covered with well-marked squamæ. The disease assumed the form of psoriasis, extending in irregular patches

to the shoulders. arms, and back, and thence nearly over the whole body, including the scalp, and even portions of the face. These various parts were affected in rotation, one large portion getting well while a larger portion elsewhere became implicated in the disease. Hence there were no rhagades; but the case was marked by severe pruritus and slight fever, which was abated by the application of leeches, the exhibition of aperients, and the antiphlogistic regimen. The cutaneous irritation continued, however, for months, in spite of lotions of hydrocyanic acid, sulphuretted baths, and a variety of other remedial measures. prescribed by a physician who met me in consultation. Scales were detached at length in large quantities, blood was discharged by the violence of the patient's nails, fissures were beginning to make their appearance, and the disease became less confined to detached portions of the skin, showing a disposition to spread but not to heal, and threatening the patient with the miseries of psoriasis inveterata. The febrile symptoms having been checked, the arsenical treatment was commenced; a dose of five minims of Fowler's solution being administered three times a-day. Under this treatment, a marked change soon became apparent: the irritation ceased, the scales when separated left behind them a more healthy surface, the advance of the disorder appeared to be checked, and after three months perseverance, the whole surface was restored to its natural condition. The disease has not relapsed, except once in a very slight degree, when a few doses of the arsenical solution sufficed to remove it.

CASE 13.—*Psoriasis Inveterata of most severe character and of twenty-six years duration, cured by arsenic and vegetable diet.*

S. Q., a female servant, aged 52, unmarried, of stout make, large proportions, and phlegmatic temperament, had been a severe sufferer from the torments of a scaly disease of the skin, which had existed in various degrees of severity and extent for twenty-six years. She had frequently been under medical treatment, and was familiar with the interior of hospitals, both metropolitan and provincial; but the relief she obtained was slight and temporary, and no hopes were inspired of ultimate deliverance from her sufferings. At length her general health began to fail, and she consulted me on that account.

Feb. 22nd, 1836.—Nearly the whole body is covered with opaque and whitish laminated scales, which in some places are matted together in crusts, by the drying of the serous and sanguineous exudations from the subjacent cutis. The scales are perpetually falling off, and may be removed from her bed in the morning "by handfuls". The disease proves most severe in the internal flexures of the joints, and here, as also in many other places, there are frightful fissures (rhagades), red, raw, and gaping, surmounted by red and swollen edges, excessively sore, painful, tingling, pricking, burning, and itching. From these, upon slight exertion, a discharge of blood appears, the result of mechanical friction or laceration, which soon degenerates into serous exudation. This drying and glueing the scales together, aggravates the original disease, and produces frightful deformity of surface, the skin being generally hypertrophied, and hanging upon her like a case of armour. The head and ears, trunk and extremities, present one continuous mass of morbid cuticle, the face only escaping. The constant pain and pruritus has long deprived her of rest; and her appetite is now failing. She likewise complains of shortness of breath, oppression at the chest, general debility and some degree of fever. The pulse is somewhat accelerated, but exceedingly weak, and she is evidently no subject for depletion. A pill with two grains of calomel was ordered to be taken every night, the patient was put upon a vegetable diet, and stimulants were forbidden.

March 7th.—No sensible improvement. Three grains of calomel to be taken every night, and a lotion of nitric acid very much diluted was ordered to be applied to the most irritable portions of the skin.

16th.—The bowels have not been affected by the calomel, nor has it sensibly touched the gums. There is no material amendment in the skin. A dram of sulphate of magnesia every morning, and five minims of Fowler's solution of arsenic three times a day.

26.—Slight conjunctivitis. Pruritus much less troublesome; the surface less tender, and a general improvement in the health. Persevere with the arsenic, and smear the scalp with a little white precipitate ointment at bed-time.

April 4th.—Conjunctiva more inflamed, eyelids tumefied, skin rapidly improving. Many of the scales becoming detached, have left a perfectly healthy surface behind

them. In other places, masses of crust have fallen off, leaving only a thin scale. The pain and tingling are nearly gone. She rests well, has a good appetite, and is in excellent spirits. Her bowels being costive, she was ordered a dose of calomel with compound extract of colocynth every alternate night; the vegetable diet to be continued, and the dose of arsenic to be reduced to three minims of the solution thice a day.

June 4th.—She has taken the arsenic regularly up to this date, without inconvenience. The skin has a reddish-brown appearance, but it is smooth and soft, and there has been no vestige of scales for a month or more. She continues quite well in health, and is so altered in appearance, and has become so attractive, that she is on the eve of marriage.

July 1839.—She has been married two or three years, and has had no return of the disease. Her general health continues good.

CASE 14.—*Psoriasis Guttata prevailing at the periods of lactation, cured by arsenic.*

Mrs. E., aged 40, a delicate subject, mother of several children, has been suffering from attacks of a scaly disease of the skin, during several successive occasions, in which she has been nursing an infant. She is generally free from the disorder at other times.

Aug. 23rd, 1841.—She has an infant at the breast about four months old, and has an eruption of small squamous patches of various forms, in different parts of the body. These patches in some places assume the rounded form and snowy whiteness of *lepra alphoides*, but in others they are elevated in the centre and appear like white pearls adhering to the skin. Indeed, their more prevailing character is that of *psoriasis guttata.* This is particularly the case on the elbows and knees, where the scales are more prominent, as well as more numerous than in other parts. There is very little show of inflammation, and she suffers little from the complaint except itchiness of the scalp, and occasional irritation in other parts. She appears jaded and emaciated, and complains of general debility and nervousness. The bowels are costive, and the pulse soft and feeble. A draught composed of infusion of calumba and tincture of orange-peel was directed to be taken twice a day between meal times, and five minims of Fowler's solution of arsenic three

times a-day *with the meals.** A drachm of the milk of sulphur was directed to be taken at intervals to prevent constipation, and some calomel ointment was applied to the scalp with a view of more easily detaching the adherent scales. This plan was followed up closely for six weeks.

Oct. 1st.—The squamæ have wholly disappeared except in the scalp, and here they have more the character of dry scurf adhering to the hair than of the true scale. The skin is restored to its natural colour, and the general health is much improved.

Two years afterwards, this lady reported herself sound, and upon inquiry whether she had experienced any return of her complaint, she answered, "Very trifling."

CASE 15.—*Psoriasis Diffusa in an elderly lady, yielding permanently to arsenic.*

Miss D., a lady far advanced in years, had been for a very long period troubled occasionally with general pruritus. At length a scaly eruption appeared, presenting the character of psoriasis diffusa, in its milder forms, but thrown out in large irregular patches over almost the whole surface of the body. There was no fever, or heat of skin; the margins of the patches were not red nor elevated; the system appeared to be in good general health, considering the age of the patient, and the flakes of scale were more delicate than is usual in psoriasis, and yet not so scurfy and powdery as in pityriasis. The disease, in fact, occupied a middle station between the two. And this is the case with half of the skin diseases I have seen: they do not come strictly under the definitions of nosologists: so that if I would exemplify any one of these definitions by the selection of a well-marked case, I am obliged to pass by one, two, three, or more, as not exactly defined. And this applies especially to the squamosæ, very few of which justify the Willanean arrangement. This lady first consulted me

Feb. 24th, 1839.—The eruption, though faint and desquamating, is full upon the arms, legs, and head, and irregularly straggling over the whole trunk. The patient has been taking sarsaparilla for some time, as she thinks, with some benefit to her health, she having been reduced

* The virtues of cod-liver oil were very imperfectly known at this period.

in strength from restless nights: pulse weak. Continue the sarsaparilla, and take five minims of Fowler's solution thrice a day, and the simple vapour bath thrice a week.

March 20th.—The patient has found great comfort from the vapour bath, and thinks that it has promoted the desquamation of the scales. The skin is rapidly improving. Continue.

25th.—The eruption is more troublesome, the pulse is quicker than natural, and the skin hot. Take a saline draught every five hours, and a dose of aperient pills at bed-time. Continue the drops and vapour bath.

27th.—Much better, no fever, no pruritus: conjunctiva sore. Continue the arsenic in doses of four minims. In this way the patient went on gradually improving for three months.

June 20th.—She has taken the arsenic steadily till now, considers herself well, and proposes to return home to-morrow. There is scarcely any appearance of the disease left: and she was advised to persevere in the arsenic (under the watchful care of a medical friend), for several weeks. Sixteen years after this lady was under treatment, I received a grateful message from her, assuring me that she continued perfectly well.

CASE 16.—*Psoriasis Inveterata in the legs, perfectly cured by arsenic.*

This species of psoriasis may be of very partial extent, but it is not the less inveterate or difficult to subdue on that account.

Mr. G., a gentleman of spare habit, fair complexion, irritable temperament and active disposition, was attacked with a scaly disease about three years since, soon after becoming a frequent resident at the sea-side. The disease first attacked the left leg, which got nearly well, and then the right leg became affected; and here the disease seemed disposed to become permanent.

Jan. 10th, 1846.—The right leg is surrounded with a patch of scaly cuticle extending all round the limb, nearly from the knee to the ankle. It is red, heated, and attended with severe pruritus. The skin is cracked, fissured, and covered with rhagades, which are red and raw, and frequently bleed under the infliction of the patient's nails.

Five minims of Fowler's solution to be taken thrice a day with the meals.

17th.—The leg is no better. The tongue is foul, the pulse quicker than natural, and the patient seems heated, and urgently requests that he may have a cooling lotion for his leg. I recommended leeches to be applied instead, and a dose of calomel and colocynth, followed up by a senna draught; the diet to be reduced and the arsenic continued.

27th.—He has a strong objection to leeches, and has used a saturnine lotion instead, which materially increased the irritation. But the action of the purgative (which was violent) and the reduced diet have cooled the system; the leg is somewhat better. Continue the arsenic.

Feb. 3rd.—Some return of the pruritus. Pulse quick. Repeat the pills and draught, and continue the arsenic.

14th.—Very much better. Conjunctiva slightly inflamed. Reduce the dose to four minims.

23rd.—Slight return of pruritus from error in diet. Repeat the pills and draught. Persevere with the arsenic.

March 23rd.—Much better, cooler, and more free from pruritus. The leg looks nearly well, nine-tenths of the morbid surface being now covered with smooth, healthy cuticle. Conjunctiva inflamed.

April 6th.—The patient has taken his medicine very irregularly, and the disease is again advancing: but its character is not inflammatory. Take five minims of Fowler's solution thrice a day punctually.

May 3rd.—The arsenic has been taken regularly, and the disease appears to be quite well. The patient persevered in the medicine till about the end of July; and up to the present time continues perfectly well.

In this case it happened more than once, that whenever the patient became careless with his medicine, the disease returned. It was necessary to interdict all stimulants for a few weeks, but he has long returned with impunity to his usual generous diet.

Although active treatment is required in the most acute cases of this disease, it behoves me to state that cases of this type are now very rare, much more rare

indeed than they formerly were. This agrees with the general change in the type of disease noticed and acted upon by all experienced practitioners. Twenty years ago, about every tenth case of squamous disease occurring in my practice required either local or general blood-letting; but within the last four years not one in two hundred has required general bleeding, nor one in fifty, leeches. The most active forms of dermatic inflammation will generally yield to mercurial and saline purgatives, antimonials, and a restricted diet. The cases which reach me from the country are more generally athenic in their type than the town cases, but the asthenic cases are, in dispensary practice, far more numerous than those displaying vigorous vascular action. This does not, however, disprove the inflammatory nature of the disease, for inflammation may partake of a low character, and may as readily co-exist with debility and exhaustion as with plethora and vigour. In these cases the cod-liver oil often becomes an important adjunct in the treatment.

Pityriasis. The third genus under the order squamæ, is described by Willan as consisting of "irregular patches of thin slight scales which are repeatedly produced and separated, but which never form crusts, nor are attended with fissures or excoriations." The descriptions which different authors give of the pathology of this disease, are equally contradictory and confused. In fact, the term pityriasis, when limited in its signification by the above definition, is applicable to several different forms of disease, which are clearly distinguishable from each other, chiefly by their colour; and (as will be seen in the

sequel) the diagnosis of each is important. In describing these various appearances by what I have myself seen, I find it necessary to adopt the sub-divisions which facts have forced upon me, regardless of the views of other authors, no two of whom appear to be agreed.

The most common form in which we are called to treat the disease is the dandriff of infants, which likewise occurs on the scalp of aged persons. Willan calls it *pityriasis capitis*, but as I have frequently seen it in other parts of the body, and as the scales always exhibit an ivory whiteness, I shall take the liberty to call it—

1. *Pityriasis Eburnea.* A delicate desquamation of white scales, like the scrapings of ivory. When it appears on the scalp the scales are often imbricated, or matted together; when on the forehead, temples, face, neck, or arms, it is more delicate and floury. It is distinguishable from the crusta lactea (porrigo larvalis) by the colour and by the friable character of the desquamation, and by the entire absence of pustules and purulent incrustations. It requires little treatment beyond frequent ablutions, and in infants it disappears spontaneously with the growth of the hair.

2. *Pityriasis Rubra.* This is an inflammatory form of the disease, in which the skin is red, rough, dry, and harsh, and not easily pressed into folds. The scales are first red, then brown. It affects the outer aspects of the limbs, and is generally accompanied with some obvious disorder of the general health. The *treatment* should first be directed to rectify this disorder; this done, an arsenical course is generally necessary; and even after this has effected its object,

the skin may remain dry and harsh like parchment. This condition is easily removed by rubbing in the ung. hydrarg., watching carefully its effects on the gums. I have found but little benefit from the iodine ointment in these cases.

3. *Pityriasis Arsenicalis.* This form of the disease is, like the others, distinguishable by its colour, which is *dirt-brown.* It invariably owes its origin to a long course of arsenic, and as regularly disappears when the medicine is withheld. It affects primarily and chiefly those parts of the body which, being covered by the dress, are not much exposed to the light. It is a valuable sign of the system being well saturated with arsenic, and in some cases is the only sign observable. There is no harm in it, but the patient should be watched. It occurs chiefly in females of delicate complexion. A lens reveals very delicate scales, brown and shrivelled. The appearance to the naked eye is that of dirt-stains.

4. *Pityriasis Lutea* (called by Willan, *pityriasis versicolor,* by other writers, *chloasma*). The colour of the patches is a brownish cinnamon yellow. They appear on the breasts, abdomen, groins, and thighs; occasionally on the back, more rarely on the extremities; and I have seen them on the forehead and the neck. They are often extremely well defined, like land and water on a map; and the sound skin is so distinct and so white, as compared with the diseased parts, that it scarcely looks healthy, although it is in fact perfectly so. Minute scales are visible on these yellow patches, but the peculiar colour is due to some change in the rete mucosum. There are two forms of this disease, which have no sort of pathological relation

to each other; yet there is so great a similarity in their appearance that they may easily be confounded together. One of them is contagious in its origin, and local in its character; the other is non-contagious and constitutional. The contagious pityriasis lutea is the least common form, and probably communicated by the sporules of a microscopic plant, described by some observers as common to both diseases, and as constituting their cause. It is distinguishable from true chloasma (the non-contagious pityriasis lutea) by the borders of the patches being indistinctly shaded off, and by their more irregularly diffused form: whereas in the latter disease there is an abrupt, well defined, and frequently serpentine outline, as well as a more decided peculiarity of colour.

Treatment. The non-contagious form of the pityriasis lutea requires the same treatment as lepra, but it is often slow in giving way. The mineral acids are sometimes useful for a time, but they seldom or never cure the disease. I have known it yield to cod-liver oil. The contagious pityriasis lutea is said to yield to the diluted sulphureous acid lotion applied on a piece of rag covered with oil silk, but this occasionally fails, and the effect is seldom permanent. Sulphur ointment is still more objectionable, and perhaps the most satisfactory treatment is to apply sulphur through the blood. It may be swallowed in its simple or compound form, and in small doses frequently repeated. If this fail, the chloride of arsenic will succeed. It will so effectually restore the tone of the cutaneous vessels, as that the parasite must die for want of an appropriate soil. All parasites feed on impaired structure, and although this disease appears to be commu-

nicable by the transplantation of the fungus from one individual to another, it by no means follows that the presence of the parasite constitutes the disease. I believe it only communicates it. For it is certainly not communicable to every person, for very few of our dermatologists admit that it is contagious at all. But when a morbid condition of the dermis, or of the blood which supplies it, is such as to constitute a soil for the fungus, there it takes root and communicates the disease. It is therefore generally necessary not merely to destroy the fungus by acid lotions, but to correct the morbid condition of the blood by alterative medicines; which done, the vegetation finds no congenial soil, and dies of innutrition.

5. *Pityriasis Nigra.* This is a tropical disease which I have never seen, and shall therefore not attempt to describe.

Nearly all the forms of pityriasis are disorders of a trifling character, seldom giving the patient much annoyance; but the disfigurement they occasion, especially in the face, neck, and bosom of females, often makes the patient anxious to be cured. Those who have suffered from syphilis, and are attacked with pityriasis lutea, often imagine that these yellow stains are syphilitic. But there is a marked difference between the reddish-brown, coppery hue of syphilis and the sandy-yellow tint of pityriasis.

The following cases will illustrate the influence of arsenic over the more common forms of the disease, many of which do not correctly belong to any of the foregoing divisions:—

Case 17.—*General Pityriasis, occurring as a sequela of Influenza, cured by arsenic.*

Miss M., aged 30, a female of delicate health, irritable

bowels, and subject to nephritic ailments, had an attack of influenza in January 1846, which left her very weak for months afterwards, and affected with a "sinking sensation" at the precordia.

July 20th, 1846.—An eruption of pityriasis has recently made its appearance rather suddenly, extending over the whole surface of the body, the face and hands alone excepted. It is developed in small patches irregularly and indistinctly circumscribed, of a pale brown colour, slightly rough, and desquamating perpetually in the form of fine floury scales or scurf, itching very much, particularly at night. She has recently suffered from anxiety and fatigue incident to family affliction, and complains of pain across the shoulders, and extreme lassitude and depression. The pulse is weak and frequent, the tongue foul, and the appetite has failed for the last three weeks. The bowels are relaxed, the urine high-coloured but without sediment, the catamenia regular but scanty. A grain of blue pill, with three of compound rhubarb, were ordered to be taken every night, and an effervescing mixture with compound tincture of cardamoms every fourth hour. Under this treatment, which was continued for two or three weeks, her general health was materially improved.

August 10th.—The bowels are more quiet, the appetite is restored, the patient feels stronger and in better spirits, the tongue is clean, and the pulse natural: but the eruption is rather increased than diminished. Five minims of the solution of arsenite of potass were ordered to be taken thrice a-day with the meals, and no other medicine whatever.

22nd.—She has taken the arsenic only twelve days. The conjunctiva is slightly affected; the eruption has wholly disappeared, leaving the cuticle sound and smooth. She now left her home for two or three weeks, and finding herself well, discontinued the medicine of her own accord. The eruption has not returned, her bowels have become less irritable than formerly, and her general health excellent.

CASE 18.—*Pityriasis Aurium of three months duration, cured by arsenic.*

A. B., aged 17, a servant girl, has been troubled with a scaly eruption behind both ears for three months. The

skin is inflamed and irritable, and desquamates in thin powdery flakes. Her general health is good, and the catamenia regular, but the bowels are costive.

July 3rd, 1846.—A dose of cathartic pills at night and an aperient draught in the morning. Ordered a low diet.

4th.—The medicine has acted well, but the ears are no better. Six leeches to the left ear, and a drachm of sulphate of magnesia with half a grain of tartarised antimony thrice a-day. The parts in contact to be smeared with weak calomel ointment.

8th.—Less burning and itching in the affected parts, but no visible improvement. Five minims of Fowler's solution thrice a-day with the meals, and an occasional aperient. This treatment was persevered in for a month, and a visible improvement was observed after the first week.

Aug. 10th.—Quite well.

The slighter forms of pityriasis, occasionally appearing on the neck and bosom of young persons of delicate skin, as well as the dandriff of infants, usually disappear spontaneously, and are scarcely entitled to be called diseases.

But there is no disease of the skin which exhibits more variety of form and appearance than pityriasis. Its causes and complications are equally numerous, and the treatment must be regulated accordingly.

Ichthyosis, or *fish-skin*, is described as a thickened, hard, rough, and, in some cases, almost horny texture of the integuments of the body, with some tendency to scaliness, but without either the deciduous exfoliations, the distinct and partial patches, or the constitutional disorder which belong to lepra and psoriasis.

Although Willan has included ichthyosis in the order squamæ, modern authors have regarded the state of the epidermis described as "fish-skin," as rather a congenital peculiarity of structure than a disease: and

before I had seen much of this singular appearance, I felt disposed to coincide with this view. But further experience has convinced me that Willan is right. The scales of ichthyosis are beyond question a morbid secretion of the dermis. That the disease has existed from birth is no proof that it is either no disease at all, or an incurable condition of the skin. For there are other diseases affecting children from their birth, and diseases which are easily cured. Moreover, ichthyosis *is* a curable disease; it often yields to arsenical treatment as readily as any other disease of the skin, though not quite so certainly. I have repeatedly seen cases in which the skin has for years presented a rough and ragged appearance, scarcely human; and yet under the influence of arsenic, the whole surface has become smooth and delicate. In some instances this restoration of the natural secretion has been permanent, in others the disease has returned; but in all it is possible to relieve the surface of that disposition to fissures and rhagades which it commonly shews during the winter, to the extreme annoyance of the patient. As an external application pure glycerine mixed with Fowler's solution makes an excellent lotion, but it is sometimes necessary to dilute it with water.

The following case, selected from about fifty others which have come under my treatment, will prove that the disease is curable.

Case 19.—Jane W., a fine-grown girl of 15, presented herself at the Western Dispensary for Diseases of the Skin, with a rough horny condition of the integuments, particularly on the outward aspects of the limbs, but affecting every part more or less. The knees were covered with ridges of horny secretion, the loins were rough like a nutmeg-grater, even the skin of the mammæ was indurated

and rough, and the nipples were covered with imbricated horny scales. The face did not escape: flaky scales were hanging about every part of the person.* The disease was not observed at birth, but soon afterwards. The patient applied for treatment,

March 11th, 1853. She was immediately put under a course of arsenic, and the skin gradually became smoother, and after twelve months the entire surface of the skin became perfectly smooth. She afterwards married, and had no difficulty in nursing her infant, the mammæ and nipples being restored to a normal condition.

I have rarely found any difficulty in restoring the skin to a smooth condition, but in some instances the roughness has returned after the arsenic has been discontinued.

Before dismissing the order squamæ, I think it necessary to warn the young practitioner, that a large portion of squamous diseases which he will meet with in practice, are decidedly of syphilitic origin; and I am inclined to suspect, that nearly all the cases which will not yield to arsenic properly administered, belong to this category. I am the more anxious to note this distinction, because the scaly forms of syphilis occur at all ages, and in patients in whom the existence of the disease would not be suspected. The non-mercurial treatment of the primary forms of syphilis, which has become the fashion of the last twenty-five years, has multiplied the cases of hereditary syphilis to an extent of which few practitioners appear to be aware. These cases more frequently present affections of the skin, than of any other tissue: and in persons of a swarthy or olive complexion, it is sometimes exceedingly difficult to make a satisfactory diagnosis. As mercury is the only medicine to be relied on in the syphilitic squamosæ, in all doubtful cases the adminis-

tration of a few consecutive doses of calomel will soon demonstrate the nature of the disease. If this do not act promply on the skin, and more especially if it be found to aggravate the disease, I should conclude that it is not syphilitic, and in that case substitute arsenic for mercury. But if a sound skin appears upon the desquamation of the scaly patches, we have only to push the mercurial treatment, (not in the timid fashion of the day,) and the disease will rapidly disappear.

I am aware I am treading on controverted ground, and it is far from my intention to pursue the subject in this place, especially as I have published a separate volume on the subject.*

* On Syphilitic Eruptions, Ulcerations, etc., (second edition.) Churchill.

CHAPTER IV.

ORDER III.—EXANTHEMATA.

"EXANTHEMA, (rash.) *Superficial red patches variously figured, and diffused irregularly over the body; leaving interstices of a natural colour, and terminating in cuticular exfoliations.*"

Most of the diseases comprehended in this division are very fully discussed, not only in every course of lectures on the theory and practice of medicine, but in every standard work on the same subject. It will, therefore, be unnecessary that I should give an elaborate history of them in a work intended rather to supply what is wanting than to reprint what is already well and fully known. But it is very important that the diagnosis of these diseases should be more carefully studied than it has been of late years.

Rubeola, Scarlatina, Urticaria, Roseola, Purpura, and Erythema,—are the diseases which Willan has grouped together, as constituting the various forms of superficial red patches, called "rashes."

To clear away the difficulties of diagnosis, it will be as well to take three of these diseases, sometimes mistaken for each other, in order to compare them with each other. These are rubeola, scarlatina, and roseola. The latter is always a mild disease, bearing a slight resemblance in appearance to the other two.

We will first compare *rubeola* with *scarlatina*.

Rubeola.

The eruption is of a *dusky ruby colour*, having a curdled appearance, many of the small patches assuming a semi-lunar form, and irregularly diffused. It appears on the *fourth* day of fever,* and is ushered in with *catarrh* and injected conjunctiva. After the fever subsides, the sequelæ to be apprehended are—

Sore eyes,
Swollen glands,
Pneumonia,
Chronic eruptions.

Scarlatina.

The eruption is of the *colour of a boiled lobster*, consisting of innumerable red points, sometimes unequally diffused. It appears on the *second* day of fever, and is always accompanied with *sore throat* and swollen tonsils, very rarely with catarrh. After the fever has subsided the sequelæ to be apprehended are—

Dropsy, local or general.
Deafness, sometimes permanent.
Offensive discharges from the ear, the membrana tympani having been burst by an abscess.

Both scarlatina and rubeola are contagious and attended with fever, and occur, as a rule, but once in the life; and both are liable to be fatal if the eruption become of a purple or livid hue. In both, the treatment must be conducted on enlightened principles rather than routine. Inflammatory symptoms must be met with promptness, but with great caution: prostration should be speedily recognised and duly cared for: in measles the cough should be relieved by anodynes; and during convalescence the patient should be well purged as well as well nourished. The subsequent desquamation is a process of importance, especially in scarlatina, and sometimes requires to be promoted by baths and frictions.

* There is no uniform regularity in this. But four days is the average of the cases I have seen.

ROSEOLA is a rose-coloured rash, very similar in its general form to measles, but less distinct, attended with less fever, and is altogether a trifling febricula. There is no catarrh, but little soreness of the throat, and in scarcely any case delirium.

The three remaining genera arranged under this order have no natural relation to each other, except that they are not any of them strictly diseases, but rather symptoms of disease; and yet, viewed as isolated symptoms, they are very uncertain signs, and in themselves betoken nothing definitively. *Urticaria* (the stinging-nettle rash), is a peculiar congestion of an ephemeral nature; *erythema* is a mere blush in its common forms, though often a symptom of deep-seated mischief when it is of a sluggish and permanent character; *purpura* is not a disease of the skin, but an affection of the capillary vessels connected with various conditions of the system.

URTICARIA (*or nettle-rash*). "Not contagious. A round, oval, or longitudinal elevation of the cuticle, usually denominated wheals, which have a white top often surrounded by diffuse redness." It is usually preceded by pain, oppression, or a sense of weight in the precordia, and with hurried respiration. It often results from eating indigestible articles. Shell fish, particularly mussels, will occasion it in some persons, and many kinds of fish in others. It is sometimes severe in character, and accompanied by alarming constitutional disturbance. This is the acute form, which requires an emetic followed by purgative.

There is likewise a chronic form of urticaria, in which, whenever the skin is warm, it tingles unplea-

santly; and isolated white elevations, like the wheals produced by the stinging-nettle, surrounded by a finely shaded blush (the form of which is generally destroyed by the finger nails of the patient), are to be seen on every part of the body covered by the clothes, and occasionally in the neck, face, and other exposed parts, where the skin is thin. These wheals will appear and disappear three or four times in a day, and although the patient is free from the disorder at times, its frequent recurrence may become a source of annoyance for months or years together, in spite of medical treatment, which is too generally administered with reference to the stomach alone. Disorder of the digestive organs is seldom the cause of this affection. It appears rather to result from the same hidden cause which originates chronic skin diseases of other character.

Treatment. There are few diseases which require a greater variety of treatment in different cases than this. Sometimes alkalies are required, sometimes acids, or tonics; in other cases mild purgatives, as magnesia and its sulphate, sometimes preparations of iron; and many cases will yield to arsenical treatment when other means fail. The following illustrate this.

CASES OF CHRONIC URTICARIA YIELDING TO ARSENICAL TREATMENT.

CASE 20.—Mrs. D., a middle-aged lady, in the autumn of 1845, became subject to attacks of chronic urticaria, without being able to assign any cause for the disease. Having endured it for many weeks she requested my advice.

Nov. 5th, 1845.—Several times in the day an eruption of white wheals, elevated and surrounded by a faint blush, appear in succession in various parts of the body. The general health is good, and the tongue clean. A dose of calomel with colocynth was ordered at bed-time, and an

aperient draught on the following morning. A refrigerating lotion was directed to be used to such portions of the skin as were particularly troublesome.

Dec. 20th.—Temporary relief only having been obtained from this treatment, the patient is desirous for some plan being adopted with a view to her permanent cure. Five minims of Fowler's solution of arsenic were ordered to be taken with her meals thrice a day: but the medicine was taken irregularly, and without any decided benefit.

July 18th, 1846.—The disease, which had been less troublesome in the winter, has returned and become most annoying, depriving the patient of her rest, and impairing her strength and spirits. A short course of aperient medicines having been first administered, the arsenic was again prescribed, and taken regularly, in the usual dose for a month, by which time the disease had entirely vanished, and has not since returned.

Case 21.—Miss N., aged 28, a lady enjoying a moderate share of health, while on a visit to the sea-side had a sudden attack of nettle-rash in its acute form, preceded by some disorder of the digestive organs, and a sense of constriction at the precordia.

May 21st, 1846.—The whole surface of the body is covered by the well known wheals of urticaria, and the patient suffers much from the irritation and stinging sensation commonly experienced in this disease. There is slight fever, nausea, and headache. A dose of aperient pills was ordered immediately, an effervescing saline every fifth hour, and a cooling lotion to be used sparingly.

26th.—The disease shows no disposition to yield. The pulse is full, and the system heated and irritable. Ten ounces of blood were taken from the arm, and the medicines continued.

27th.—The febrile action has subsided, but the skin is scarcely relieved. Four minims of Fowler's solution thrice a day.

29th.—No fever; skin no better, some degree of dyspepsia, acid eructations. To each dose of the arsenic was added six minims of liquor potassæ, and a drachm of compound tincture of cardamoms.

June 2nd.—The eruption is rapidly disappearing, and the irritation has subsided. Stomach more comfortable.

Take the alkaline draughts twice a day, and the arsenic thrice, as before.

9th.—Quite well.

Sometimes the rash is modified by assuming a papular form (*lichen urticatus*). To this form of the disease the same principles of treatment will apply; but urticaria is a symptom of so many different conditions of the system, that he will treat it most successfully who is most observant and careful and discriminating, each mode of treatment being always more or less plainly indicated by existing symptoms, such as fever, dyspepsia, atony, etc., etc.

Erythema. "A nearly continuous redness of some portion of the skin, attended with disorder of the constitution, but not contagious."

Dr. Willan has described six varieties; but some of these distinctions are of little importance in practice. Erythema sometimes consists of temporary red patches in the arms, neck, breast, or face of delicate or hysterical females (*erythema fugax*). They require no treatment but such as other existing symptoms may indicate. Occasionally small tubercular-looking, and slightly elevated tumours are interspersed through the patches (*erythema tuberculatum*). These are occasionally, when attended with fever, symptomatic of general tuberculosis. But they are more frequently chronic, and attended with little or no indisposition in the general health. The latter case requires alterative treatment—mineral acids, alkalies, or arsenic, as the general symptoms may indicate.

In an œdematous state of the lower extremities, attended or not with varix or ulcers, a dark red-

brown, or leaden condition of the skin is often present (*erythema læve*). The treatment consists of careful bandaging, purgatives, and diuretics, and sometimes mercurial preparations are required.

Drs. Willan and Bateman describe a fourth species, in which the eruption appears chiefly on the arms, neck, and breast, in extensive irregular patches of a bright red hue, studded with imperfect papules (*erythema papulatum*), and indicating serious depression of the system. I have not met with this complication, but a chronic form of papules with red patches occurs frequently, and requires depletion first, afterwards alteratives.

The *erythema nodosum* is the only variety which may be considered as a distinct and well-marked disease. It occurs in oval patches, slightly raised along the tibial aspect of the legs of females in youth and middle age. The red colour becomes black or blue in eight or ten days (like bruises), and then subsides. It requires mild aperients, being generally attended with fever, but it always subsides spontaneously in from two to five or six weeks.

The name of erythema has also been given to the redness produced by the attrition or chafing or heating of contiguous cutaneous surfaces, as under the mammæ of corpulent women, round the axillæ, in the groins, etc. (*erythema intertrigo*).

Another form of the disease (*erythema marginatum*) is described by Willan as occurring in patches bounded on one side by a hard, elevated, tortuous, red border, in some places obscurely papulated, the redness having no regular boundary on the open side. The patches appear on the extremities and loins of old people.

Bateman describes them as connected with some internal disorder, and looks on their occurrence as "unfavourable." I have not met with a case which exactly corresponds with this description, which is only one among several, differing from each other, as given by different authors.

But I am anxious to call attention to an erythematous appearance in the limbs or trunk, which indicates a deep-seated formation of matter. It is described by surgical writers, but its importance may easily be overlooked. The following case illustrates its grave import.

Case 22.—My attention was called in the year 1848, to a young lady of strumous habit but in apparently good health, on account of a dull erythematous blush which had recently occupied the anterior portion of the middle half of the thigh. In some parts the epidermis was separated a little. There was no pain nor irritation nor swelling, and but little tenderness. In a few days a very slight fluctuation was perceived, and on passing the point of a lancet through the integuments, a copious flow of sero-purulent matter occurred. A probe was passed, and sinuses were discovered running in different directions towards the bone. At length it was thought advisable to make deep incisions in various directions, collections of matter being found traversing the muscles down to the periosteum, almost from the hip to the knee. The bone was not found carious, nor denuded of periosteum, and the patient recovered. But it was reported, that in her childhood a similar disease occurred in the upper arm. The symptoms were then overlooked and neglected, and a large portion of the humerus exfoliated after seven years of suffering, leaving the bone considerably shortened.

Purpura. "An efflorescence consisting of small, distinct, purple specks and patches, attended with general debility, but not always with fever: not contagious." Such is Willan's definition of purpura.

But it is now well known, that general debility is by no means a necessary characteristic of purpura. And there is reason to apprehend that the mistaken views of pathology prevailing in Willan's time thus interwoven with a definition written for posterity, have very often, even in the present day, misled the practitioner, and induced a very improper treatment of the disease. It is on this account only (and not because I have any peculiar or original views on the subject), that I take the fair opportunity now offered of making a few remarks on the disease, with a view of protesting against the empirical treatment resulting from a preconceived assumption of debility as the cause. Of the cases which have come under my own observation in the country, certainly not one in four was associated with debility. In cities and crowded neighbourhoods, as well as in low and unhealthy spots, the reverse proportion prevails, but it is all-important, in determining the treatment, to ascertain accurately the state of the circulation, and the general condition of the digestive and respiratory apparatus, instead of assuming, without proof, the existence of an asthenic condition of the system. It is most erroneously stated by Bateman, that the purpura hemorrhagica is "always accompanied with extreme debility and depression of spirits"; for he subsequently speaks of cases in which it was accompanied by inflammatory symptoms, and was relieved by artificial or spontaneous discharges of blood; and he decidedly disapproves of Willan's indiscriminate treatment of the disease by mineral acids and tonics. There are in fact few diseases the pathology of which is so obscure, and none which require more discrimination and decision on the part of the practitioner.

The disease consists in a loss of tone in the extreme vessels, which discharge by extravasation a portion of their contents. This may occur in the skin only (as in *purpura simplex*), or it may likewise occur contemporaneously in the exhalents which open into cavities (*purpura hemorrhagica*), in which case the stomach, intestines, lungs, throat, bladder, uterus, nose, or gums, or all of them together, may discharge blood; or it may occur in these organs alone, the skin altogether escaping. Under these circumstances it is no longer a cutaneous affection, but it is the same disease and must be treated on precisely similar principles.

The *purpura simplex* is not generally a formidable disease, but it is always attended with some degree of danger. A sudden effusion of blood may take place into the lungs or other vital organ, when it is least expected; and therefore, however trifling the disease may appear in the first instance, it should never be neglected. The treatment of this simple form of purpura must be regulated on the principles already laid down for the management of other affections of the skin. Every palpable deviation from health must be rectified by whatever measures may be indicated, and if the purple spots be the only apparent lesion, and there be no features of general debility on the one hand, nor increased vascular action on the other, the disease proving obstinate, nothing will be found better calculated to correct the deranged condition of the capillaries, and to restore their deficient tone, than small and repeated doses of arsenic, gradually reduced as occasion may require. Most generally, however, purpura simplex occurs with manifest complications, and disappears when they are properly treated.

The *purpura hemorrhagica* is always highly dangerous, and sometimes runs its fatal course in four or five days. If the following distinctions were more generally regarded, there is reason to hope that many lives would be saved which are annually sacrificed to this destructive malady. The cases of purpura hemorrhagica usually met with may be ranged under three very distinct varieties, each requiring very different treatment.

1. Purpura hemorrhagica sometimes occurs as a consequence of insufficient diet, and associated with discharges of blood from the lungs. The pulse is weak, and the surface pallid. The tincture of muriate of iron and mild aloetic purgatives are the best medicines, and generally the only ones required. But these will avail little without a generous diet, and a moderate quantity of port wine. If the bowels be neglected, stimulants and animal food forbidden, and if the patient be treated for inflammatory disease of the lungs, he will sink under the attack, and either die of phthisis eventually (if predisposed to it), or of general exhaustion. Three cases of this kind have come under my notice. Two of them were sacrificed to mistaken treatment, the strength of the patient having been in each instance exhausted by abstinence; and the third, although the hemoptysis was alarming, recovered under aloetic purgatives, tincture of muriate of iron, port wine, and beef. The patient had not tasted animal food (under advice), for many months previously, although his health had been good. The low diet was ordered with a view to prevent inflammation, from which he had previously suffered—a most absurd and fallacious expedient. During one recent attack

of hemoptysis, when the pulse became unusually firm, and the respiration oppressed, a few ounces of blood taken from the arm exhibited the buffy coat; but when we consider that the buffy appearance is the result of slow coagulation, and that the blood always coagulates slowly in purpura, we shall surely hesitate before we take the buffy coat as a proof of inflammation, or an indication for a repetition of the bleeding, when the state of the pulse does not warrant it.

2. The hemorrhagic form of purpura far more frequently occurs from *hepatic congestion*, than from any other cause, and then, if treated on the tonic system, may be expected to prove fatal. The symptoms of this disease are well marked. In addition to an eruption of livid specks or patches (which are not necessarily present,) there is hemorrhage either from the mouth and gums, nose, stomach, lungs, conjunctiva, fauces, bladder, bowels, uterus, or labia; or from several of these organs at once. The bowels are constipated, and the evacuations are dark-coloured, or pitchy black. There is pain or oppression, more or less severe in the epigastric region, and in some cases, uneasiness in the head, chest, or back. When the disease has existed some time, the patient becomes generally emaciated, and the lower extremities œdematous. It is occasionally complicated with jaundice and enlarged liver.

If a patient presenting these symptoms be treated by tonics, and mineral acids, or by stimulants and turtle soup, he will most assuredly die. Timely, and active, and repeated doses of calomel combined with jalap or some other active purgative, promptly and frequently exhibited to such an extent as effectually to unload

the bowels, and relieve them of the solid masses of pitch-like fæces usually present, will give the patient the only chance of recovery. Cases abundantly demonstrative of these positions, and exhibited in a tabular form, will be found in Mr. Plumb's excellent treatise on diseases of the skin, a book which ought to be in the hands of every practitioner. The chapter on purpura is invaluable, and supersedes the necessity of illustrating the above views by other cases.

3. It still remains to be considered how to treat cases of purpura with hemorrhage, where there neither is, nor has been hepatic congestion, nor other derangement of the digestive organs, nor yet any previous deficiency in the quantity or quality of the food. Rayer relates five cases of this kind, all treated with tonics, acids, and generous diet; and some of them by oil of turpentine. Only one of the five recovered. Such a melancholy result should suggest the necessity of some new principle of treatment. If the pulse be full and firm, some relief will be experienced from the abstraction of a few ounces of blood; but the amendment will be only temporary in a majority of these cases, and in them the spontaneous hemorrhage would soon accomplish as much good as the lancet. The grand agent in the treatment of all such attacks of purpura hemorrhagica, is *vomiting produced by artificial means.* It was a maxim of that celebrated, and highly practical surgeon, the late Dr. Kerr of Northampton, that *emetics are useful in all hemorrhages which do not proceed from the head.* A case of purpura thus treated with a most happy result is related by Mr. R. P. Player of Malmesbury, in the Medical Gazette, (vol. xii. p. 608.) The subject was a young woman who

had severe hemorrhage from the fauces, numerous petechiæ marked with intervening vibices, a brown tongue, and a weak pulse. Carbonate of ammonia was given with no advantage whatever. Subsequently, half a grain of tartarized antimony was administered every quarter of an hour, till vomiting was produced, which speedily arrested the hemorrhage and cured the petechiæ and vibices. Many other cases are on record in which hemorrhage from various organs has been suppressed by vomiting. The oil of turpentine may be subsequently administered with advantage in some cases.

A fourth division of purpura hemorrhagica might be here introduced comprising cases of low or long-continued fever, in which, with the petechiæ, hemorrhage occurs. But the nature of these cases, which are familiar to every practitioner, is decided by various circumstances which must regulate the treatment, and the details of which are out of my province.

The treatment of those cases of purpura which are either identical with, or allied to, sea-scurvy, and which arise from errors in diet, require, of course, a correction of those errors, together with tonics and astringents consisting of mineral acids, preparations of iron, &c. A form of petechial eruption is sometimes met with among ill-fed children which is inactive in its nature, and not tending to hemorrhage. This requires tonics, with mild saline purgatives, combined with mineral acids.

CHAPTER V.

ORDER IV.—BULLÆ.

"BULLA (*Bleb*); a large portion of the cuticle detached from the skin by the interposition of a transparent watery fluid."

Under this order Willan has included erysipelas, pemphigus, and pompholyx.

Erysipelas, (placed in this category, because when severe it occasionally throws out blisters,) is a disease properly belonging to the febrile exanthemata; and as, on account of its relations to this order, (being an acute, febrile, and often an epidemic disease,) it has received a large share of attention from all writers on medicine, I do not think it necessary to say more about it, except that it is distinguished from the various forms of erythema (with which it is often confounded) by the great heat of the inflamed patches, by their circumscribed form, by the low fever and delirium, and by the tendency to vesication and abscess.

Pemphigus, or *pompholyx*. These are but two names for one and the same disease. It is characterised by an eruption of bullæ from the size of a split pea to that of a large walnut, with or without an inflamed base. The bullæ generally burst in a few days, sometimes leaving a dried scab, and sometimes degenerating into

ulcers. The fluid contained in the bullæ is at first transparent, but it soon becomes red and often black. The bullæ appear on various parts of the body. In the milder forms they are often confined to a certain locality. I have seen them in the face only, and in the hands and fingers only. Sometimes, a single bulla of large size makes its appearance at one time, being followed after it has burst by another and another (*pompholyx solitarius*). It is sometimes a trifling disorder (*pompholyx benignus*), in other cases (*pompholyx diutinus*) it is a tedious and painful disease, attended with fever, languor, lassitude, headache, sickness, and pains in the limbs. And a fourth variety is described by Dr. Stokes as *pemphigus gangrenosus*, once epidemic in Ireland among children. I have myself seen but two distinct varieties, which I should designate *acute* and *chronic* pemphigus.

Of *acute pemphigus* (a rare disease) I have seen but one case, for which I am indebted to my friend Mr. Marson of the Small Pox Hospital, who kindly made known to me that a case had been sent to the hospital mistaken for small pox. The patient was received with the hope of saving her life, as she was not in a state to be sent away. She was a young woman of healthy constitution, and could in no way account for the attack. The disease was ushered in by slight fever of a low type. The bullæ were large and numerous and spread over the whole surface of the skin. When I saw her she was in a deplorable condition. Her whole body covered with large bullæ in various stages of blister, scab, and ulceration, many of them black and sanious. Her face was swollen, and from her eyes and nose a muco-purulent and most copious discharge

issued, which reminded me forcibly of glanders in the human subject. There was also a fœtid discharge from the vagina, the mucous membrane of which appeared to partake of the disease. The pulse was weak and not rapid. She lay in a quiet and almost comatose condition; but there had been no delirium. The disease proved fatal in a few days.

Chronic Pemphigus is a much more common disease, but still comparatively rare. In the year 1853 it appeared to be epidemic. There were several cases at the Western Dispensary for Diseases of the Skin, and others at the Cutaneous Hospital in Blackfriars. Two of the cases under my care at the dispensary were from the same locality, Ogle Street. In one of them the hands only were affected, in another the face, and in two others the soles of the feet. They all recovered very slowly. In one case, a female, the tongue was red at the tip and there was menorrhagia and great debility. I prescribed quinine with the mineral acids, but I am not sure that much benefit was derived from medicine. One patient went into the country and rapidly recovered, returning in a month fat and blooming.

CHAPTER VI.

ORDER V.—PUSTULÆ.

"*Pustula* (pustule); an elevation of the cuticle with an inflamed base, containing pus."

This order contains five genera; *Impetigo, Porrigo, Ecthyma, Variola,* and *Scabies.*

IMPETIGO "is characterised," says Willan, "by the appearance of psydracia" (small pustules running together and producing scabs). "It is not accompanied by fever, nor contagious, nor communicable by inoculation, occurring chiefly in the extremities." These scabs often form a continuous crust of a dirty straw colour; and this distinguishes the disease from eczema, the secondary appearance of which is a crust of a dark mahogany colour.

By the expression "not accompanied by fever," Willan simply intended to exclude this disease from the category of eruptive fevers, such as small-pox. In the acute cases of impetigo, and even in its common forms occasionally, the affection is attended with pyrexia. But the disease very commonly assumes an asthenic form, and then the sulphate of magnesia dissolved in the infusion of roses, proves an excellent medicine to commence with; to be followed up by

arsenic, with or without bitter tonics, after the bowels have been freely relieved, the skin being frequently cleansed by the tepid bath. The success of arsenic as a remedy for chronic impetigo is strongly attested by writers on the skin. Rayer says, "I have seen a small number of very old and inveterate cases of impetigo which have only yielded to antimonial and arsenical medicines." And Dr. Green, after detailing three successful cases treated by the sulphur-fume bath—which appears to have been more successful in the pustular than in other forms of eruption—adds, "the Fowler's solution frequently proves a powerful adjuvant in these inveterate cases."

This disease frequently affects more than one member of a family, and is common in children. The following cases will give a familiar view of the common course of this afflictive and disfiguring disease in its chronic form, and will show the power which arsenic exercises over it.

Case 23.—*Impetigo assuming an inveterate form, checked by arsenic.*

Master R., aged eight years, had been, from an early age, subject to severe attacks of impetigo, extending over the whole surface of the body, and leaving hideous scars.

Sept. 13th, 1846.—The child had a pale surface and was universally covered with scars, which in some places appeared like the effects of burns or scalds, in others like the vestiges of confluent small pox. The face and head were deeply involved, the hair was thin and scanty, the head was here and there quite bald, and as the eye-lashes and eye-brows were wanting, it was difficult to imagine that the child had not been severely burned:—such are the ravages of impetigo. The patient had been free from disease during the few weeks he had resided at the sea side; but it was now reappearing in the head in all its former virulence, extending rapidly, and threatening to spread (as

it had done previously more than once) over the whole body. The general health was not very materially affected; but the appetite had lost its edge, the pulse was weak, and the tongue exhibited a dull-red central streak, expressive of debility. A generous diet and frequent exercise in the open air were strictly enjoined: a mixture with infusion of roses and compound tincture of bark was ordered to be taken twice a-day, five minims of Fowler's solution of arsenic thrice a-day with the meals, and a gentle aperient occasionally.

Nov. 6th.—The above plan has been pursued for nearly eight weeks. He is much better in health and stronger, and has regained his appetite and spirits. The cutaneous disease, instead of pursuing its usual course, having made advances for two or three weeks, has now nearly disappeared, leaving no new scars. I have not heard of him since.

CASE 24.—His sister, aged nine years, came under my care on the 21st of October. Her case was *very similar*, but less severe. It was similarly treated, and with a like result.

This is the asthenic chronic form of the disease. A kind of impetigo of an opposite type occasionally occurs. It is described by Willan under the name of *impetigo erysipelatodes*.

CASE 25.—*Impetigo Erysipelatodes, of severe character, yielding to active depletion, and ultimately cured by arsenic.*

Mr. Y., a studious gentleman, about twenty-five years of age, of nervous temperament and sedentary habits, but of robust muscular frame, has been more than once attacked by a most annoying cutaneous affection, which on one occasion extended nearly over the whole surface of the body.

March 29th, 1841.—The integuments of the throat, neck, and chin, are covered with a minute pustular eruption of acute character, seated on an inflamed ground. The skin is hot and dry, pulse 100, weak; and there is pruritus of a distressing description, in the affected parts. The patient was put on low diet, a dose of compound colocynth pill,

combined with blue pill, was prescribed to be taken at night, and a saline aperient in the morning. By pursuing this plan of treatment for a week, the activity of the disease was arrested, and the chronic form which succeeded yielded in a fortnight to a course of arsenic.

Having enjoyed good health through the subsequent eighteen months, he at length became nervous, and perhaps hypochondriacal. Complaining to a friend of lassitude and debility, he was advised to take a course of quinine, with Huxham's tincture, and to refresh himself daily with four or five glasses of port wine, a beverage to which he had hitherto been unaccustomed. Having acted upon this advice for five or six weeks, the time arrived for him to pay the penalty.

Sept. 20th, 1842.—He has had a very sudden and severe return of his old malady; the pustules have broken out on the right side of the neck, chin, ear, cheek, and temple, extending every day, after the fashion of erysipelas, until one eye is closed, and the other swollen. Pulse 120; prostration and anxiety; skin hot and dry. An active mercurial cathartic was administered, low diet ordered, and a refrigerating lotion. In the evening, his bowels had been fully relieved, without any mitigation of the disorder. Effervescing draughts, with tartar emetic, half a grain every four hours.

21st.—No better; headache; slight delirium; pulse 120, moderately full. Venesection to fourteen ounces. The cathartic to be repeated, and the salines continued. The refrigerating lotion to be abandoned.

22nd.—No better. Pulse 120; purulent incrustation extensively apparent. Increase the dose of tartarized antimony; repeat the cathartic.

23rd.—No better; restless night; delirium; an eruption of vesicles extending to the other side of the face. Venesection to sixteen ounces. A draught composed of sulphate of magnesia and infusion of senna every fourth hour.

24th.—Better. Bowels freely purged; blood buffed. A saline draught every fourth hour.

25th.—Some increase of the pustules. Two cathartic pills at night, and a laxative draught in the morning.

26th.—Better; a purgative draught every fourth hour. From this time, by persisting in the same kind of treatment, the patient gradually improved.

Oct. 1st.—Skin better; dyspepsia; debility. An alkaline draught thrice a-day, and an improved diet.

16th.—Violent headache; quick pulse; hot skin; delirium. Apply a blistering plaster to the back of the neck, and take a grain of tartarized antimony every fourth hour.

17th.—Better; continue the medicine.

18th.—Better; take the antimony every eighth hour.

24th.—Better in all respects, but the skin is still irritable, and new pustules appear occasionally, with less activity of circulation. Five minims of Fowler's solution were now exhibited thrice a-day. This medicine was persisted in for three weeks, at the termination of which period the patient was quite well.

Dec. 15th.—He continues quite well, and has not, to the knowledge of the writer, had any return of the disease.

The analogy of this case to erysipelas is a striking feature, and suggests the importance of comprehensive views of cutaneous pathology.

The cases of impetigo one meets with among the poor are commonly attended with debility and imperfect nutrition. The treatment consists of repeated purging, powerful tonics, and cod-liver oil.

PORRIGO. *Porrigo* is described by Willan as "a contagious disease principally characterised by an eruption of the pustules, denominated *favi* and *achores*, unaccompanied by fever." Under this designation Willan has placed five or six disorders, scarcely one of which exactly answers to the description. And although he has the authority of Celsus for the generic appellation, the term is inconvenient and unsuitable. Nor have other authors been more happy in their divisions and definitions of diseases of the scalp. Indeed, as I feel bound to give an honest account of the matter, I will state the truth. The more the student sees of these diseases, the more difficult he will find it to

identify them with the diseases of *books;* and the more he reads, the more contradictions he will find in authors, and the greater difficulty will he experience in reconciling them with each other, and with nature. All this comes of our inveterate systematising. Ignorant of the plans and objects of nature in establishing disease, as well as of her mode of removing it, authors have vainly attempted to establish divisions and distinctions which do not exist except in their own imagination, and to adapt their treatment accordingly; and, if they do not succeed, they end by calling the disease all manner of ill names—"obstinate", "inveterate", "intractable", "unmanageable", "malignant"; which is only another way of acknowledging that *they do not know how to cure it.*

I have seen many hundreds of cases of disease of the scalp (perhaps I might say thousands, but as I wish to be believed, I will keep within the truth). I have watched them carefully. I have endeavoured—laboured, indeed, to bring them into regimental order, but I cannot. They are so jumbled together, the contagious with the non-contagious, the vesicular with the pustular, the local with the constitutional, that I do not hesitate to pronounce it impossible to give a distinctive name to one in fifty, or to determine by its appearance only, whether it be contagious or not. My medical brethren often send me patients with some disease of the scalp, and really appear ashamed that they cannot clearly diagnose it, and that they do not know what to call it: it does not square exactly either with what they read, or with the beautiful plates and models in their library. In other cases, several medical practitioners have been consulted, and each one

has given the disease a different name, just as authors have appended to each name a different description, and to each description a different plate or model.

Notwithstanding these difficulties, it is desirable to make out *one* distinction, the only one, indeed, which is important in practice. We should, if possible, separate the contagious from the non-contagious, judging not so much from the mere appearance of the disease, as from the history of the case. If a scalp disease breaks out in a family or school, and affects one child after another, especially if the children are allowed to use each other's combs, brushes, or caps, it is pretty clear that one common cause exists. That this cause is contagion cannot perhaps be proved; for where each child is placed under the same sanitary circumstances, it is natural to suppose the same disease may be engendered in each. Still, we may fairly assume that the disease is communicable. On the other hand, where an infant at the breast becomes affected with cutaneous disease of the scalp, and the other members of the family escape, there is here no ground to suspect contagion. So, when the hair of a patient rapidly falls off in defined patches, leaving a whitish surface of marble smoothness without a pimple to be seen, and when this occurs in mature age, there is, again, no ground to suspect contagion.

Treatment of ring-worm or scald-head. Under this plain designation I include the *porrigo furfurans*, the *porrigo scutulata*, and the *porrigo favosa*, of Willan, believing them to be forms of one and the same disease.*

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* The *porrigo lupinosa* might also have been included, so far as treatment is concerned, but it is a strongly-marked variety of the disease, and is now

The profession has not at present taken any great credit with the public for success in the management of these cases. And yet popular belief has invested with infallible virtue at least a hundred different external applications. Perhaps one might be pardoned for entertaining some degree of scepticism regarding the efficacy of every one of them, inasmuch as it is quite certain that a spontaneous cure is frequently effected within a limited period, extending from two or three months to as many years; and it is very natural that whatever remedy has happened to be applied just before the disease has worn itself out, should obtain the credit of having effected the cure; especially if various other remedies had previously been tried in vain. The spontaneous cure, its prompt and ready manifestation in some cases, its protracted course in others, and in a few its non-development, may be easily explained.

The chief point of difference between the economy of an animal and that of a vegetable is that the one is nourished by a mouth, the other by a root. The animal is a nutrient tube seeking aliment by locomotion, the vegetable derives its nourishment from the soil by which its root is enveloped, and to which it is immovably attached. Many vegetables thrive and germinate for a limited time only, in one and the same soil, and seem to have the power of appropriating to themselves in a short time all the nutritive elements which are yielded by that particular soil, and unless it be supplied by artificial means the vegetable becomes

seldom seen in this country. The *porrigo larvalis* (the *crusta lactea* of earlier authors) is peculiar to infants at the breast and will require a separate consideration. The *porrigo decalvans* (alopecia) is also a distinct disease.

first emasculated or sterile, then starved, and dwindles by degrees, until at length it dies without issue. This appears to be the case with the porriginous parasite. The scalp of one patient, (from causes which are as yet imperfectly understood,) will nourish a crop year after year, while another will be exhausted of its nutrient powers in a few weeks, the disease travelling from one portion of the scalp to another until it can no longer be sustained, and the patient recovers spontaneously. Having observed these processes to be very common, I for many years declined prescribing anything for ring-worm, advising only that the child should be fed on a nutritious and digestible diet, and the head kept clean; and the disease has generally disappeared in a few months, still occasionally persisting for two or more years. Observing, however, that the healthy and strong often recovered much sooner than the sickly and weak, it occurred to me that in many cases something might be done in the way of constitutional treatment, and that probably, by promoting a vigorous condition of the general health in the asthenic, and in others by altering the condition of the blood, the parasite might be starved or poisoned, and thus an earlier cure might be effected. And, even if this plan should fail, it would be more satisfactory, both to the patient and the practitioner, to have tried a rational experiment, than either to have treated the disease empirically, or to have abandoned the patient to the quack, which is generally his destiny when "the faculty" are at fault.

And first, with regard to the *local management*, although no medicinal appliances appear to be required, it is scarcely necessary to say that cleanliness

and isolation are essential in all cases. By isolation I mean, not only that the child should be kept from all unnecessary contiguity with other children and their apparel and head-gear, but that the disease itself should be isolated, by closely clipping off the surrounding hair. There is a two-fold advantage in this. The part may be more easily washed and cleansed, and the disease will be prevented from being communicated by the hair from one part of the scalp to another. A pair of finely pointed scissors is better than a razor, as shaving is often productive of great irritation. The hair should be cut closely for an inch or more round the circumference of every bald or scaly patch, however large, at least twice a week; and the whole head should be well sponged or drenched with tepid water twice or thrice a day. Beyond this, nothing is necessary to be done externally: the scissors will remove all removable scales or incrustations, and the ablution will do the rest, the whole head of hair being always kept moderately short. The less the head is covered the better. Oil-silk caps are abominable contrivances, producing in effect a perpetual steam-bath, or else choking the exhalent vessels with their own excrementitious matters. A light thin muslin cap may be worn as a decent veil; and, without checking the transpiration, it will have the advantage of equalising the temperature, which is of great importance in the local treatment of cutaneous inflammation, whether arising from accident or disease.

The *internal* or *constitutional* treatment of ring-worm should be founded upon that universal law of nature that the strong feed upon the weak. This applies as well to the parasite as to the carnivorous feræ. A

state of debility or disease not only predisposes the system to the influence of morbific agents generally, but renders it a special prey to everything which feeds upon it. Thus lumbrici thrive in the intestines of the half-starved, syphilis commits its most fearful ravages upon the sickly and the strumous, scabies and want are boon companions, and ring-worm triumphs over the sickly ones whom it infects, but often retreats before a more vigorous tide of health.

It is certain that many cases of ring-worm and scald head will get well if attention be paid to the health of the patient. The FIRST INDICATION, then, is to restore the health, if it be faulty. The soil on which the parasite grows will then probably nourish it no longer. It will starve and die, the eruption will disappear, and the hair will grow. The following cases will illustrate the principle.

CASE 26.—In a girl of seventeen, of stunted growth and cachectic appearance, who had suffered from porrigo for four years, and in whom the catamenia had appeared once only at the age of fourteen and never afterwards, the disease persisted in spite of all the remedies used (without effect) for the promotion of the general health and the restoration of the uterine function. Here was some constitutional defect, which, unless remedied, will leave the patient a prey to the disease probably for years to come.

CASE 27.—A rickety girl, 4 years of age, was brought to the Dispensary for Diseases of the Skin, with the scalp nearly covered with a thick tenaceous crust of porriginous character, which appeared in early infancy, and which was with extreme difficulty detached. An eruption of less severe character, partly vesicular, partly pustular, appeared on the face, eyelids, abdomen, groins, and thighs, itching much, and often discharging freely. The tibiæ and femora were bowed, and the child was pale and emaciated. An aperient every alternate night, together with tonic and

alterative treatment, sufficed in less than a month to remove every trace of eruption, except that on the scalp, which was much improved. After this the health became again disordered, and then the scalp got worse; and for seven months this child was under treatment, the scalp getting better and worse just as the health was improved or deteriorated.

These two cases may suffice to show the difficulty of restoring the scalp when the disorder of the general health cannot be rectified; and this holds good, whether the disease be contagious or not.

I shall now endeavour to show, by the converse, how readily, even in cases some of them manifestly contagious, the disease will recover spontaneously, where the health, previously disordered, can be easily restored.

CASE 28.—A girl, of 7 years of age, took the ring-worm at school. The original eruption had disappeared, but the whole surface of the scalp had remained for two years in a diseased condition, being covered with scales, and the hair being very scanty. She was evidently out of health, and was wasting. In a fortnight's time, the health having been considerably amended by alteratives and aperients, the scalp began at the same juncture to assume a much improved appearance, and speedily got well.

CASE 29.—A rickety child, of 2 years of age, living under ground, with large head and open fontanelle, was brought with large patches of purulent incrustation over the scalp, the hair having fallen off. The health was very far from right, and she had long been troubled with ascarides in the rectum. She was treated with occasional doses of calomel combined with aperients, and a dose of wine of iron twice daily. A bath of salt water was ordered night and morning. The disease had existed seven months; and, in about four months after the commencement of this treatment, the scabs had fallen off, leaving a healthy surface, the hair was rapidly growing, and the health was greatly restored.

The foregoing cases are not cited to prove the truth of the theory, but merely to illustrate and explain what has been advanced; namely, that porrigo, when associated with broken health, is very apt to share the same fate as the health, being easily cured when the health is readily restored, and, *vice versâ*, becoming intractable only when the general health proves to be irrecoverably impaired. When there is a syphilitic taint, ring-worm will often persist until the syphilis is cured; and when a strumous diathesis prevails (the lungs being sound), we have our remedy in sea-bathing, which I have often found most effectual, as also in the iodide of iron and cod-liver oil, which, if important adjuvants, are by no means substitutes.

But there is, lastly, a class of cases in which ring-worm, with or without partial baldness, coexists with undeniably good health: and it would appear that in these cases, either there is a species of vegetation capable of being nourished on healthy structure, or that there is some local disease which does not affect the general health. If this latter were the case, however, the local disease ought to be curable by local appliances, which it is not. It may therefore be assumed that the healthy structure is affording nourishment to a living being, probably vegetable, probably cryptogamous; which living being must be destroyed before the disease can be cured. Nor can I conceive of *any* rational mode of treating the disease which does not aim at the destruction of the life of the vegetation, which must either be starved or poisoned. The starving process is impracticable: we know of no method by which it can be accomplished. The poisoning process is very simple both in theory and in practice, and

I think it will be found very successful. The *principle* is already acknowledged by the profession. We poison the *acarus scabiei* with sulphur. We poison *tæniæ* with turpentine, *ascarides* with calomel, and *lumbrici* with scammony. But the vegetable parasite which feeds upon our hair bulbs is out of our immediate reach: we can neither touch it with ointment nor drench it with lotions; and if external applications have ever been really useful in this disease, they have probably been absorbed and have impregnated the blood with some principle which has proved destructive to the vegetative process: and if this poison could be introduced through the mouth, its dose might be regulated with advantage. Probably there are many poisons which might in this way, by careful instillation and slow absorption, poison the parasite without injuring the patient. It is with this view, and not because it is useful in other diseases of the skin, that I have recently been attempting to destroy the source of ring-worm with arsenic, which has also this advantage, that it has a peculiar and specific action on the hair bulbs, the very seat of the disease; this at least may be inferred from its influence over the pubescent function. Few persons take a lengthened course of arsenic without finding that at the end of the course they have a better head of hair, both as to quantity and quality, than when they began. And this is in some degree true whether the patient be bald with age, or whether the hair have been thinned by illness, or by over-brushing, as often happens to young females. Arsenic, therefore, may cure ring-worm in one of two ways,— either it may poison the parasite and thus allow the disease to get well; or by promoting a more vigorous

vitality in the organic seat of the disease, render it unfit for the vegetative process; and thus starve the parasite; or it may have a twofold influence. The effect of the medicine is, at all events, curative, and often very rapidly so. If the hair has fallen off, it generally begins to grow in a period varying from one week to six; and this medicine agrees as well with children as with adults.

PORRIGO DECALVANS, OR ALOPECIA (*Baldness*). In this disease the hair falls off in distinct circumscribed patches, leaving the skin of the scalp smooth and white. These patches gradually extend until one-half or even the whole of the scalp is denuded of hair. It occurs both in children and adults. In schools it frequently spreads, like other diseases of the scalp, from one child to another. In adults it sometimes attacks the eyebrows, beard, and whiskers, leaving on the denuded spots the same characteristic smooth white surface as on the scalp. In some forms of the disease the hair falls not in patches only, but partially from all parts of the scalp, leaving first a general thinning of the hair and then a bald scalp. In others we observe a premature tendency to senile baldness, commencing at the vertex, which can scarcely be called disease.

Alopecia may be congenital, but this a very rare occurrence. I once saw a young lady who never had had a single hair on the scalp, eyebrows, or eyelids. She was in good health and otherwise good-looking. Her sisters and brothers had no deficiency of this kind. I am not aware that any attempt was made by way of remedy.

Causes. The morbific influences under which alopecia is produced are little known. When the falling-off of the hair in patches occurs in schools, it appears to result from the cachexia induced by a large number of children assembled under the same roof, sleeping in the same chamber, breathing the same air, and fed on the same diet. This, as in ring-worm, produces local debility and prepares a soil for the growth of parasitic vegetations which may be the means of communicating the disease.

Diagnosis. The baldness of alopecia cannot easily be mistaken for the thinning of the hair in old age, or the premature decay of the hair follicles in the young. For, (1) alopecia appears in patches, more or less distinct, clearing away the hair entirely, leaving a polished surface of marble whiteness; on the other portions of the scalp the hair grows in its wonted luxuriance: whereas in senile decay the hair is gradually thinned. (2) The progress of alopecia is often very rapid, a week or ten days sometimes sufficing for the entire disappearance of a large patch of hair; whereas the process of thinning from decay is always slow and imperceptible. (3) Alopecia commonly commences over the parietal or temporal bones, (or some portion of the side of the head, often with a patch on each side); whereas senile baldness commonly commences at the vertex and spreads towards the forehead.

Prognosis. Alopecia is easily cured in the young. In advanced years, especially if the disease is established contemporaneously with the commencement of natural decay, recovery is not so certain, but there is still ground of encouragement from treatment.

Treatment. Alopecia (like ring-worm, but less fre-

quently) is occasionally observed to be susceptible of a spontaneous cure. And this may account for the delusion under which even modern authors appear to labour, that it may be cured by stimulating applications;—a mode of treatment which I was compelled to abandon twenty years ago. For many years indeed I found no advantage from any of the numerous remedies which, (misled by authors), I was induced to try: and I am indebted to accident for the knowledge which I now possess of the only successful method. An elderly gentleman whom I attended for sycosis about ten years ago, and who had become partially bald on the vertex from natural decay, had been taking small doses of arsenic for six weeks, when he called my attention to the surprising fact that hair was growing luxuriantly on the bald portion of the scalp. His words were, "Doctor, you have given me a new wig." The hair was short, but healthy and thick, and the crop remained till his death, which occurred about four or five years afterwards. I naturally inferred that if arsenic, internally exhibited, exerted a potent influence over the hair follicles *in decay*, it would probably be found of service *in disease.* I immediately tried it in a case of alopecia in an elderly lady who was likewise the subject of organic disease; but I confess it disappointed me. I then tried it in a younger subject, in whom the bald patches had become confluent and but little hair was left on the scalp. In less than two months the whole surface was covered with fine glossy hair which gradually thickened as it grew in length. The patient had no return of the disease. I have since tried it in upwards of sixty cases, and although it occasionally fails when the patient is be-

yond the middle age, it has scarcely ever disappointed me in younger subjects, some of whom, it is true, might possibly have recovered without it; but there are two reasons why the arsenic is demonstrably useful. In the first place, its effects are almost invariably apparent after *about six or eight weeks*; secondly, in cases where the medicine has for any reason been intermitted, the hair has again fallen off, and has again been restored on the patient resuming the arsenic; and, thirdly, no external application has been used, not even soap nor friction, but the patient has been directed simply to cleanse the scalp with a soft sponge and tepid water. The preparation used was the liq. arsen. chlorid.; the dose, ten minims three times a-day.

I believe I am correct in saying that no author has as yet proposed to treat this annoying disease by arsenic. Henceforth, writers on *materia medica* will have to record this virtue in addition to the many singular qualities of this wonderful medicine,—that it restores the hair follicles in disease, and sometimes even gives them new vigour in decay, thus realising the fabulous powers which hair-dressers and perfumers are wont to claim for their "Syrian washes," "trichogenous pommade," and other miraculous compositions, to the great cost and disappointment of the public; sometimes even entrapping an unwary member of our own unsuspecting profession. I shall now proceed to demonstrate the efficacy of arsenic, by relating several cases.

CASE 24.—*Porrigo Decalvans, or Alopecia, in a young girl. The hair restored by arsenic. Relapse of the disease, cured by arsenic a second time.*

Aug. 14th, 1855.—E. F., aged 13, a healthy-looking girl,

has had a falling off of the hair in patches every summer for five years. In the winter it partially grows again. She was ordered ten minims of the liquor arsenici chloridi thrice a-day with her meals.

Oct. 9th.—The hair is growing round the bald patches, contracting their size considerably. No other effects from the arsenic. Increase the dose to fifteen minims.*

Nov. 9th. Hair growing fast. Continue the medicine.

The medicine was taken more than a year before the new crop of hair assumed a normal luxuriance ; but during this period the catamenia had appeared, and she has now a frequency and amount of discharge which may be called menorrhagia, and which continues for two or three weeks at a time. Although I had never known arsenic to affect the uterus in any way, I suspected that it might in this case increase the evil.

Dec. 19th, 1856.—Scarcely any deficiency of hair ; complains of weakness, pelvic tenderness and pressure, and has an almost constant sanguineous flow from the uterus. Discontinue the arsenic and take twenty drops of dilute nitric acid three times a-day.

Jan. 2nd, 1857.—Much better. Catamenia normal. Persist.

March 25.—Well in health, but the hair has again fallen off considerably since she left off the arsenic. The arsenic was now resumed in smaller doses.

May 6.—Hair growing very fast, no further shedding in any part. Colour regular ; health good. Persist.

The case is still under treatment.

The point to be noticed in the above case is, that whereas the disease was formerly worst in summer, it got well in that season under arsenical influence and returned in the winter of 1857, when the arsenic was withheld.

CASE 25.—*Porrigo Decalvans in a boy occurring after scarlatina and persisting for eight years, cured by arsenic in two years.*

W. T., aged 13, was brought to the Dispensary June 7th,

* Children of th[illegible] (and younger) often *appear* to require a larger dose than adults; but I am not quite satisfied that they take their medicine regularly.

1853. There were six large bald patches on his head, white, smooth, and without eruption. The hair had been falling off ever since he had the scarlatina in the year 1845. Health unimpaired, but the tongue is not quite clean. Ten minims of the liquor arsenici chloridi were ordered to be taken thrice a-day immediately after a meal, and a dose of aperient pills every alternate night. The hair to be cut close and the scalp kept clean.

June 28th.—No change in the scalp. Conjunctiva slightly inflamed, face puffed. Tongue cleaner. Continue the pills: reduce the dose of arsenic to seven minims.

Aug. 9th.—Hair growing on the bald patches. No conjunctivitis; take eight minims for a dose.

30th.—An attack of herpes zoster. Continue the medicines.

Sept. 13th.—Herpetic eruption well. *Hair growing on every part of the scalp.* Take ten minims of the solution for a dose.

During the next few months, a second and a third bald patch appeared in the original healthy portions of the scalp.

Aug. 1st, 1854. He has had an attack of typhus fever, in consequence of which the arsenic has not been taken for the last three months. The hair has again fallen off in several places. Resume the arsenic.

29.—Another bald patch.—No improvement. Persevere.

Sept. 26.—Hair growing. Continue the arsenic. The patient was occasionally inattentive and neglectful, which protracted his recovery considerably.

July 2nd, 1855.—The hair is now growing luxuriantly over the whole scalp. Discharged, cured.

Case 26.—*Porrigo Decalvans (apparently contagious) in a child, cured by arsenic.*

Sept. 23rd, 1853.—M. A. A., aged 8, has four distinct bald patches on the scalp. The mother believes the disease to have been communicated to her at school seven months since. General health good. Take ten minims of the liq. arsen. chlor. ter in die, and an aperient powder every alternate night.

Dec. 11th.—Hair growing fast. Persevere.

Feb. 8th.—Scalp covered with hair. Persevere.

March 10th.—The medicine has been neglected and the hair is again found defective. Resume the arsenic with regularity.

31st.—Scalp well covered. Discharged, cured.

CASE 27.—*Porrigo Decalvans (contagious) in a child, cured by arsenic.*

Sept. 23rd, 1853.—A. A., aged 5, sister to the above, has six bald patches on the scalp. The disease appeared about a month after her sister's, with whom she slept. There is likewise a pustular eruption on the scalp. The child is feeble, but not unhealthy. She was treated exactly as her sister, the dose of the solution being only eight minims.

Dec. 11th.—Hair growing luxuriantly on the whole scalp, eruption quite well. Discharged, cured.

Two months afterwards, when the sister had a return of the disease, this child again took it. It yielded readily to arsenic a second time.

CASE 28.—*Alopecia after scarlatina, in a girl, 9 years of age, treated successfully with arsenic.*

Nov. 22nd, 1853.—R. J., æt. 9, has seven patches on the scalp wholly denuded of hair. The hair fell off, after an attack of scarlatina eighteen months ago, and has never grown since. Her health is delicate and she has a cough, but no physical signs of disease. The chloride of arsenic was given as in the last case.

Dec. 30th.—Hair growing round the circumference of the patches. Health improved, but appetite defective. Persevere.

July 11.—Scalp nearly covered with hair.

Oct. 3.—Has been in the country for three months and neglected her medicine. Baldness partially returned. Resume the arsenic.

Nov. 3.—Hair growing everywhere; health improved; discharged, cured.

CASE 29.—*Alopecia with hypertrophy of the dermis in a young woman treated by arsenic.*

Jan. 27th, 1854.—E. H., aged 25, single. Has a profusion of fine glossy black hair of unusual length, but there are three bald patches on the scalp, from two to six inches

in diameter, and the dermis in those parts is deeply hypertrophied and the epidermis thickened. The disease has existed three years. Health moderately good; subject to head-aches. Take ten drops of the liq. arsen. chloridi ter in die. Pil. colocynth. c. alternis noctibus.

April 18th, 1855. The disease has returned. There are now four patches more. The patient reports that her scalp has been nearly well, and her health much improved, but her eyes becoming inflamed she left off the medicine for several months. Ordered to resume the medicine under the care of a medical practitioner in the North of England, where she resides. I have not heard from her since.

In relation to the last case, I may observe, once for all, that in the arsenical treatment of cutaneous disease, if the arsenic is to be abandoned (as is the common practice) every time the conjunctiva becomes slightly inflamed, it will rarely, if ever, succeed in curing the disease. Nearly all my failures have arisen from the inattention of the patient to this simple point. The proper course is to reduce the dose to about three-fourths of the original dose, and then the continuous action of the arsenic will very rarely fail.

Porrigo Larvalis (*Crusta Lactea*). This form of porrigo demands a separate notice, because it is not contagious, it does not cause baldness, and it does not affect children beyond the age of infancy. It appears during lactation, on the forehead, scalp, or cheeks, and occasionally covers the whole head and face. The eruption is pustular from the first, and the discharge concretes into dirty looking yellowish scabs. Sometimes the discharge is copious and acrid; in other cases it is trifling in quality. In the latter there is little irritation; in the former, much.

Diagnosis. The crusta lactea differs from ring-worm in attacking infants at the breast, who seldom or never get ring-worm. It differs from eczema in the purulent character of the eruption, and the yellow colour of the crusts. In eczema the eruption is vesicular, and the crust of a dark mahogany colour.

Prognosis. The duration of the disease is most uncertain; but it always gets well sooner or later. The sudden retrocession of the eruption is rarely followed by convulsions, though this is common in eczema.

Treatment. The only *topical* treatment required is frequent ablution with a soft sponge and tepid soft water, without soap. If by a diligent use of the sponge the discharge can be removed before it cakes, the disease is divested of much of its afflictive character. The *constitutional* treatment must be regulated by the condition of the child, and by the state of the mother's health. There is no specific for the disease, and sometimes it will continue during the whole period of dentition. When the infant is weak and badly nourished, preparations of iron and cod-liver oil are useful. Where, on the other hand, there is a full habit, especially if the skin be hot and irritable, purgatives are necessary. Both mother and child may require calomel with other purgatives; but, far more frequently, debility is the marked character of the disease.

ECTHYMA differs from impetigo, so far as relates to its local diagnostic character, chiefly in the size of the pustules, which are much larger and more isolated than those of impetigo. They are said never to con-

tain colourless serum; and they are always distinctly, and often distantly, separated from each other.

In a large majority of instances, ecthyma is met with rather as an accidental accompaniment or sequela to other diseases, than as an idiopathic ailment. It often follows small-pox (which the eruption very much resembles), measles, scarlatina, and other cutaneous affections; it usually complicates inveterate scabies, and occasionally syphiloid diseases. It is very commonly indicative of debility, but not invariably nor necessarily. It occasionally tends to ulceration, especially when it attacks the poor and ill fed; and to this class of society the common form, *ecthyma vulgare*, especially belongs.

The treatment of ecthyma is resolvable into general principles, and must be directed first to the removal of its causes or complications. This done, it will generally disappear spontaneously. But it sometimes appears (like impetigo) in connexion with apparently good health, as a constitutional ailment, affecting several branches of a family in early childhood, and disappearing in adolescence. Under these circumstances I have found arsenic, cautiously administered, of very great service in checking the tendency to pustulation; and I have known it, in two instances, to destroy apparently all tendency to disease. I abstain from relating these cases, as they were too complicated to prove anything. Like impetigo, porrigo, scabies, and rupia, it is sometimes endemic in dirty, close, insalubrious courts and alleys. The following will show how difficult it sometimes is, and how important, to distinguish between the common and the syphilitic ecthyma.

CASE 30.—*Ecthyma, appearing as a sequela to Syphilis, but not syphilitic in its nature, yielding to tonics and generous diet.*

Mr. L., aged 20, a young man of healthy constitution, had an eruption of pustules on the left shoulder, and left side of the neck, showing the character of ecthyma. Their colour was dull, and rather inclining to a livid hue. The reddish-brown or characteristic copper colour was wanting. Yet it might have been easily mistaken for syphilis, the primary form of which he had contracted six months previously, which was followed by an inflamed inguinal gland six weeks afterwards. This eruption made its first appearance four months after he had considered himself perfectly cured. After six weeks treatment without amendment, he consulted three or four surgeons successively, and when he afterwards called upon me he reported their opinions to be about equally divided as to the syphilitic or non-syphilitic character of the disease: and I confess the history of the case and the shade of the eruption appeared to me a little contradictory. But finding his pulse weak, and learning upon inquiry that he had been living for some time on a reduced diet, and had lost flesh, I recommended a full and generous diet, prescribed tincture of bark with aromatic confection, and in less than a week he was quite well, and has had no relapse.

I have never met with a case of ecthyma attended with generally increased vascular action, or even with plethora; but there are such cases on record, and they must be treated on the antiphlogistic system, notwithstanding their close resemblance in external appearance to diseases usually expressive of debility and exhaustion.

VARIOLA (*Small-pox*). The treatment of this too well known disease does not fall within the scope of this work.

SCABIES (*Itch*). "An eruption of pustules, or of small vesicles, which are subsequently intermixed

with, or terminate in, pustules; it is accompanied by constant and importunate itching, but not with fever; and is, in all its varieties, contagious. It appears occasionally on every part of the body, the face only excepted; but most abundantly about the wrists and fingers, the axilla, the fossa of the nates, and the flexures of the joints." No fault can be found with this description, except that, in some cases, there are neither pustules nor vesicles, but simply papules. In other cases, there is a degree of scaliness; but the most conspicuous marks are the scratches and excoriations produced by the patient's nails.

Cause. The proximate cause of the itch has been asserted to be the introduction of a species of acarus, called the *acarus scabiei*, from the skin of a person afflicted with the disease, to that of the patient; and this mode of communication is said to have been demonstrated by experiment. Moreover, it has been rather hastily assumed, that as the acarus is an insect, and as insects (breathing by spiracles) are easily suffocated by oleaginous substances,—so it must follow that the inunction of lard or oil would cure the itch as readily as sulphur ointment; for the acarus, being the cause and essence of the disease, only required to be dispatched, and his work would be finished. This is the galloping rate at which we often see therapeutics advancing since the invention of railway travelling. But it happens that *all* this is wrong; for, 1. The experiments instituted by M. Albin Gras, (one of the pupils at St. Louis,) some twenty years ago, and afterwards published, do not appear to me to prove that the disease is communicated by the acarus, but rather the contrary. For, in the first experiment, two living acari were actually introduced into the arm of the stu-

dent without producing the disease. In fact, they appeared to have died. In the second experiment, in which seven acari were introduced, some vesicular appearances followed; but the acari were then poisoned, instead of having the chance given them to quit their quarters for a new subject. The other experiments were equally inconclusive. 2. The acarus is always found imbedded under the epidermis, but not in the vesicle or pustule; and no observations have ever shewn the probability, or even the possibility, of his ever leaving his nest in search of other pasture. 3. The vesicles of scabies are often seen where no acarus is to be found. 4. Oil will not suffocate the acarus; for, even if he be immersed in it, he will live for hours. And 5. Neither will the inunction of lard cure the itch.

The real cause of scabies is *dirt*. Dirt originates it, sustains it, propagates it. A dirty nurse may introduce it to a nobleman's family, but here it will stop. A clean young man may take it by going into dirty company, but he will not spread it through a cleanly household. The acarus is an accidental result of dirt.

Treatment. The proper treatment of scabies is known to every body. The inunction of simple sulphur ointment every night for three nights, followed by a warm bath, plenty of soap, clean linen, and well baked or fumigated woollen clothing,—is about as infallible as anything in medicine. But all the affected members of the household must submit to the same process at one and the same time, or re-infection may be expected. Vesicles and itching will often occur after the disease is cured; but these result from the sulphur. Gentle ablution and mild purgatives will dissipate the sulphureous eruption.

Endemic scabies. Scabies is said to be sometimes *epidemic.* However this may be, it is certain that there is a form of scabies which may be called *endemic* and which often baffles the skill of the medical advisers. It is chiefly, if not wholly confined to large establishments, schools, workhouses, &c., and so far as my experience goes it affects children only. The disease always assumes the pustular form. A few years ago I was requested to visit a large public charity school of some hundreds of girls, from eight to sixteen years of age, in which were upwards of twenty of the girls suffering from pustular itch. The eruption consisted of pustules and boils, itching intolerably and discharging a dark-looking pus. Sulphur ointment had been used largely and had cured nearly all of them for a time, but the disease returned month after month. The establishment was exceedingly well appointed; there were baths and every convenience for cleanliness, which was practised almost to a fault. It was impossible that the disease could be communicated by acari. It was clear that there was some constitutional origin for it. Some blood-poison, or cachexia,—something which we do not understand, and which we are yet sometimes tempted to think we have made very intelligible by calling it by a new name, such as "mal-nutrition," "mal-assimilation," "mal-digestion," "mal-conversion," "mal-appropriation," "cacochymia," "blood contamination,"—all which sounds wondrous wise and deeply scientific;—but how were these poor girls to be cured? Were they half-starved? No: several of them were fat, and all of them had plenty of food, and wholesome food too. I examined the bed-rooms—they were exceedingly well-ventilated:—the drainage—nothing could be better:—the water—

pure and well-filtered. There was an airy playground, and the rooms were lofty. Two things only were wanting—a greater *variety* of food, and more exercise in the *open air*. The diet, though excellent of its kind, was one unvaried round of boiled mutton, porridge, soup, potatoes, bread. Boiled mutton twice a week, soup twice a week, &c. No beef, no pork, no veal, no fish, no greens, turnips, salad, rhubarb, gooseberries,—no variety in fact. Then, the girls never left the premises, which were closed in by high walls on all sides, forming a quadrangle of impure air which they were breathing from month to month; the muscles, lungs, and heart, were never fully called into action. Then the digestive organs were tired of acting upon the same mixture of elements, the assimilative organs got dull too, and the blood, never fully refreshed, became foul and unhealthy, the action of the skin was enfeebled, and pustulation was set up for eliminative purposes. I advised, with the full concurrence of the surgeon in attendance, that the governors of the school might be requested to order a greater variety of diet, substituting beef or pork for mutton; turnips, greens, carrots, or salad for potatoes, and the like. I also advised that they might have a free run in the Regent's Park, (which was near) three or four times a week. The governors were astonished. Who ever heard of the itch being cured by beef, carrots, and exercise? absurd! However, my judicious and intelligent friend, who had the medical charge of the establishment, was firm. The girls got their beef and turnips. I saw them rejoicing among the green trees of the park;—and I found, on inquiry, that the endemic itch had disappeared from among them.

CHAPTER VII.

ORDER VI.—VESICULÆ.

"VESICULA (*Vesicle*); a small orbicular elevation of the cuticle, containing lymph, which is sometimes clear and colourless, but often opaque and whitish, or pearl-coloured. It is succeeded either by scurf, or by a laminated scab." (Willan.)

According to this definition, which is admirably correct, there ought to be no difficulty in distinguishing a vesicular from a papulous or pustular disease; as for example, eczema from lichen, or impetigo. Yet the difficulty in reality is so great, that cutaneous diseases in their aggravated and mature conditions, belonging to any of the above orders, are seldom diagnosed aright. Pimples, originally "dry", will sometimes discharge serum, or exude scurfy crusts; pustules, which are obvious enough when isolated, appear, when confluent, as large, thick, adherent crusts; and vesicles, instead of appearing like a crop of pimples containing a clear pellucid fluid, are rarely seen but in the incrusted form, and they are always tending to pustulation. But a little attention to the *colour* of the crusts (a point of essential importance, which I cannot find noticed by any author), will at once remove all the difficulty. When pure *lymph* dries

and desiccates, it produces a dark mahogany scab, as occurs in the last stage of the vaccine vesicle. The crusts of all vesicular diseases approach this colour. *Pus* dries into scabs of a dirty-yellow, or straw colour. Papules, when degenerated into a moist eruption, throw out a *greyish* crust, often streaked with blood; and a little search will discover several dry pimples in the vicinity. So that, except when these diseases are actually complicated in a given case, no difficulty need exist in distinguishing the different orders.

The diseases grouped by Willan under the order vesiculæ are varicella, vaccinea, herpes, rupia, miliaria, eczema, and aphtha.

VARICELLA or *Chicken-Pox*. This is a mild febrile eruption of vesicles which occasionally contain a mixture of pus with the serum, and generally become pustular in a few days. It requires little or no treatment, but it is important to be able to diagnose it correctly, which is the more difficult because it not only itself assumes various forms called chicken-pox, swine-pox, blister-pox, &c., but there is an eruption, sometimes occurring after vaccination, called modified small-pox or "variolella," which very much resembles some of the forms of varicella. I believe that no description nor drawing is capable of throwing light on the subject. The practised eye recognises the difference, and no other. But it usually happens that the modified small-pox is, like the unmodified, thrown out all at once, or at least within thirty hours; that is, all the pustules are of about the same date, whereas the vesicles of chicken-pox are often very irregular in their appearance, fresh vesicles arising for four or five

days or more, and then going through the same stages as the first. The variolous eruption, even when modified by vaccination, is more regularly timed, all the pustules making their first appearance almost simultaneously, and arriving at maturity at one and the same time.

VACCINEA is the small-pox modified in its intensity by being transmitted through the cow, or perhaps any other graminivorous animal. When communicated to a human being of any age in such a manner as that its specific poison shall enter into the circulation, it produces little disturbance, but gives the patient about the same amount of immunity from small-pox, as successful variolous inoculation. But the proofs that the specific poison *has* entered the blood are not so palpable in vaccination as in variolation. And so little attention has of late years been paid by vaccinators in general to the *diagnosis* of *vaccinea*, that thousands pass for vaccinated persons who have never really taken vaccinea, and thus, being wholly unprotected, they are liable to small-pox, and often take it.*

HERPES. This was once a generic name for a great number of cutaneous diseases. The term is now restricted to a non-contagious ephemeral eruption,

* It is impossible for me to pursue the subject here, but every student should read the instructive paper of Mr. Marson, the surgeon of the Small-Pox Hospital. It will be found in vol. xxxvi of the Medico-Chirurgical Transactions. This is the most useful and important document on vaccination that has appeared in the English language since the days of the great Jenner. See, also, a paper on Vaccination by Dr. Seaton, in Dr. Richardson's "Sanitary Review", afterwards published as a pamphlet. This contains a full and comprehensive account of the whole matter.

consisting of a number of small vesicles closely clustered together in irregular heaps, on an inflamed base, going regularly through a series of stages, like an eruptive fever, and terminating in one, two, or three weeks. The lymph in the vesicles is at first clear and colourless, but it soon becomes milky and opaque, and ultimately concretes into scabs.

Diagnosis. Herpes cannot well be mistaken for anything but eczema, which it resembles in the size of its vesicles. But the vesicles of eczema are not placed on a red, inflamed surface; nor does the latter observe any well-defined stages; moreover, it is a chronic disease, and shews more tendency to spread than herpes. The scabs of herpes differ from those of impetigo in their colour, which is dark, and in their form, which is compact and definite.

Willan has described herpetic eruptions under six varieties. (1) The *herpes phlyctenodes*, which has no certain seat; (2) The *herpes zoster* which extends nearly round the waist; (3) The *herpes circinatus*, which appears in a ring on some part of the face, neck, arms, or shoulders; (4) The *herpes labialis*, which surrounds the mouth, affecting the lips more or less extensively; (5) The *herpes præputialis*, often mistaken for a primary syphilitic sore; and (6) The *herpes iris*, consisting of concentric rings, affecting chiefly the hands or fingers. I shall first speak of the *herpes zoster*, because it is a peculiar and well-defined eruption belonging to the exanthematous class in its history and pathology.

HERPES ZOSTER, or *Shingles*, is usually preceded by slight fever for a day or two, after which irregular

clusters of vesicles appear on the waist, or some portion of the trunk, extending half or two-thirds round the body. I have seen it as high as the shoulders and as low as the thighs, but it rarely extends above or below the waist. It is accompanied with neuralgic or shooting pains round the waist, often severe, and sometimes surviving the eruption. The first crop of vesicles is often succeeded by a second in another locality, or even a third; but in about ten or fifteen days they all dry up into dark scabs. It is not contagious.

Of the *treatment of shingles* little need be said, except that it is better for the patient to lie in bed and dust the eruption with flour or starch, and to be content with a cooling diet, taking mild aperients and salines. When the pain is severe, a dose of Dover's powder at night with or without colchicum often gives relief.

The *herpes phlyctenodes* may be similarly treated, as also should the *herpes circinatus*, if it should be thought to require any treatment at all. The latter is not contagious, and should not be mistaken for ring-worm. The *herpes labialis* may also be left to itself; but the *herpes præputialis* may become very troublesome on account of its contiguity to the glans. It is mostly seen, in its advanced stage, as an excoriation or superficial ulcer discharging muco-pus. It is only requisite to pour a stream of water from a sponge over the part, and then interpose a piece of lint, either dry or moistened with cold water, or an astringent lotion. The lint should be cleansed and applied three or four times a day.

The *herpes iris* is a rare disease. I am not sure that I have seen it more than twice.

RUPIA commences with broad flat vesicles breaking out in various parts of the body, the serum soon degenerating into a dirty purulent matter, drying into crusts, beneath which are foul ulcers, which often spread superficially, or deeply, and sometimes dry up into prominent conical or imbricated scabs—(*rupia prominens*). Cachectic infants are subject to the disease, and there is sometimes a tendency to gangrene—(*rupia escharotica*).

Treatment. Rupia is generally syphilitic in its origin; but it attacks patients who will rarely bear mercury. The dilute nitric acid with sarsaparilla is the most likely to be useful. But the subjects of rupia are often miserable patients, half-starved, intemperate, and dirty, and then there is little satisfaction to be derived from any treatment. Cod-liver oil is useful in strumous subjects.

MILIARIA. This is the name given to an eruption which often appears during fevers. The vesicles are about the size of millet seeds. They are sometimes surrounded by slight inflammation (*M. rubra*), and sometimes appear (on a sound skin) exactly like drops of sweat on the surface (*M. alba*, or *Sudamina*). The eruption is *symptomatic*, and requires no particular treatment, except fresh air and other sanitary advantages.

ECZEMA. "An eruption of small vesicles on various parts of the skin, usually set close or crowded together, with little or no inflammation round their bases, and unattended with fever. It is not contagious." (Willan.) To this should be added that the eruption is generally

attended with severe pruritus. The vesicles are evolved and burst with great rapidity, and may easily escape detection. They pour out an irritating fluid, which excoriorates the surrounding skin. The cutis, deprived of the cuticle by desquamation, appears beset with numerous pores, from which exudes a sero-sanguinolent fluid. This dries into scabs or laminated incrustations, which take their colour from the discharge, being at first of a greenish-yellow, afterwards becoming yellow and brown, if the discharge becomes purulent; or reddish and dark-brown, if the ichor is tinged with blood. Meanwhile, fresh eruptions appear, and go through similar stages: chaps and fissures succeed, and the subcutaneous cellular tissue often becomes involved in the inflammatory process. Intense pruritus and severe smarting pains attend the evolution of the disease, which in some cases runs a course of unlimited duration. The disease is frequently complicated with impetigo (eczema impetiginodes), and is occasionally attended with disordered functions. More generally, however, there is no specific ailment, or tangible disorder, to which attention can be directed in the treatment, excepting only an inflammatory diathesis, which generally prevails in the outset, and must be promptly treated. The disease attacks certain portions of the body more frequently than the whole.

It is exceedingly common both amongst children and adults, and constitutes one of the most afflicting forms of cutaneous disease.

Diagnosis. Eczema and scabies may be easily confounded together; and certainly a vesicular eruption on the arms without any erythematous inflammation, attended with itching and tingling, can only be diag-

nosed by the history of the attack, and by evidence of contagion, which can nearly always be traced in scabies, but never in eczema. The distinction between eczema and herpes has already been noted (see herpes). The crusts of eczema may be known from those of impetigo by their dark-brown colour, impetiginous scabs being of a dirty yellow colour.

Prognosis. Eczema will yield to careful treatment, but in some individuals it will recur at certain seasons, or under certain changes of constitution, or impaired health. It occasionally occurs especially in very young children as a relief to the nervous system in dentition, and when it subsides very rapidly, either by spontaneous metastasis or indiscreet topical treatment, the brain is liable to suffer, and fatal convulsions are by no means an uncommon termination.

Treatment. As eczema is a disease generally complicated either with impetigo, lichen, or psoriasis, there is no rule for its treatment which is not applicable to other chronic eruptions. When it occurs in children of a sthenic habit, full of blood and inclined to increased vascular action, the diet should be restricted to vegetable food, the bowels should be well purged twice or thrice a week with calomel, and twice or thrice a-day with sulphate of magnesia, and the potassio-tartrate of antimony, which latter medicine is a most efficient and often essential addition. The doses should be large enough to check the appetite. After a time the irritation will subside and pustules will take the place of vesicles. The dilute sulphuric acid must then be substituted for the antimony, and the purgatives continued for a week or two. If the disease shews a tendency to persist, it will slowly

yield to arsenic, either alone, or combined with the liquor potassæ or ferruginous preparations, as the state of the general system may indicate. Precisely the same treatment is required in the adult, with the addition of leeches to the affected parts once in a week or ten days if the disease does not readily yield. This treatment applies, not to the *eczema solare*, or *heat spots*, which is a purely local disease, but only to the *eczema rubrum*, and the *eczema impetiginodes*, which latter often forms a stage in the disease rather than a species; but it sometimes occurs in asthenic habits from the commencement, and is then best treated by sulphate of magnesia dissolved in infusion of roses. Eczema is sometimes a severe disease, covering the whole or a greater part of the body, and tormenting the patient fearfully. Rhagades, excoriations, and discharges of blood often occur; and here general as well as local blood-letting is necessary. The disease often requires very protracted and determined treatment.

CASE 31.—*Chronic Eczema, acute in its origin, successfully treated by blood-letting, purgatives, and arsenic.*

[The particulars of this case were communicated to me by my lamented friend, Mr. Darvill, late of Walworth, to whose judicious and vigilant care its successful termination is attributable.]

Mr. D., a gentleman of stout proportions, pale complexion, nervous temperament, and convivial habits, had been subject to occasional attacks of a cutaneous disease for many years, and reports that his mother was similarly affected. About Midsummer, 1842, having then been nearly free from the disorder for two or three years, he felt a tingling in his legs which forwarned him of an approaching attack. In a short time the whole surface of the legs, from the knees to the ankles and insteps, and afterwards a considerable portion of the upper extremities, including the elbow joints and the forearm as far as the wrists, became

covered with an eruption of an eczematous character. The whole of the diseased parts were acutely inflamed. The vesicular character was not distinctly seen, the original eruption presenting rather the character of papulæ, containing no visible fluid. These spots increased in size, and becoming scaly or scurfy at the top, ran one into another, and speedily the surface became a continuous mass of incrustation. Slight cracks, degenerating into gaping rhagades, soon appeared, exuding a serous discharge. In the legs the discharge was abundant and sero-sanguinolent. At first, the scales were of a yellowish-green shade, not so white as the scales of psoriasis, or so yellow as to indicate a purulent character. At length they became of a reddish-brown, more or less dark and dirty in appearance. The curious in cutaneous diagnosis might dispute whether this disease was eczema, psoriasis, or lichen agrius. It is not uncommon, in these chameleon-like disorders, to find papulæ, vesicles, pustules, and squamæ, in the same individual at the same time. In this case, although it was difficult to detect the vesicular character of the primary eruption, the acutely inflammatory type, the irritable condition of the surrounding integuments, the peculiar nature of the discharge, and the *tout ensemble* which the diseased surface presented to the eye, all suggested the idea of eczema rubrum. The pain and irritation were so great as to prevent sleep, and the patient was perpetually thrusting his limbs out of bed to escape from the tormenting heat.

June 27th, 1842.—The treatment was commenced by bleeding to syncope, which was effected by the abstraction of about twenty ounces of blood from the arm; leeching the affected parts every other day; and administering purgatives of calomel, jalap, &c., with low diet. The inflammatory symptoms were very obstinate, not being reduced before the 15th of July.

July 15th.—The irritation and heat having in a great degree subsided, and the pulse being tranquil, five minims of Fowler's solution were given thrice a-day, mingled with the food; and this treatment was persisted in till about the latter end of November. About this time the disease began to disappear, and very soon afterwards the conjunctivæ became slightly affected.

Dec. 26th.—Conjunctiva more inflamed; disease gradually vanishing. Dose of arsenic reduced to three minims of the solution thrice a-day.

Jan. 12th. 1843.—"Finding the eyes not improved," writes Mr. Darvill, "I discontinued its use for a fortnight. It was then resumed, and persisted in till the beginning of April, when the skin had recovered its natural appearance. In this case there was a great tendency, throughout its whole course, to inflammatory action; but the pulse remaining quiet, it was kept under by the simple saturnine lotion."

In answer to inquiries, Mr. Darvill writes, "I perceived an improvement in the disease about a fortnight before I saw any affection of the conjunctiva: but it may have existed in a slight degree, as I did not look for it with any view to its connexion with the decline of the disease." He adds, "I think I have several times seen the disease decline at the time of the arsenical effect becoming visible, (in the eyes), but not having any notes to confirm it, it is testimony of little value."

The arsenic was continued in small doses for some weeks, and the disease did not return.

The preceding case will suffice to demonstrate both the acute form of the disease and the sufficiency of arsenical treatment in eczema, when the activity of the disease has been previously arrested by depletion. It is the type of many scores of cases, similarly treated, but the *amount* of depletion demanded by the symptoms proved to be very extraordinary. Of late, I have very rarely found venesection necessary; but leeches I have frequently applied.

The following is a case of a very different type.

Case 32.—*Eczema in an asthenic subject, cured by arsenic.*

W. J., æt. 29, formerly intemperate, but of late a "teetotaller," has suffered for four months from an eczematous eruption on the right arm. He applied at the dispensary,

Dec. 14th, 1852.—The arm is very irritable, and in addition to the vesicular eruption, he has been annoyed with boils in various parts. Liq. arsen. chlorid. ♏x. ter in die: and a dose of aperient pills every alternate night.

Feb. 14th, 1853.—He has pursued the above treatment for two months and the eczema is perfectly well.

22nd.—He is still troubled with boils. Take sulphate of iron combined with sulphate of magnesia and sulphuric acid thrice a day.

March 1st.—Well. Discharged, cured.

Eczema is a disease which presents so great a variety of phases that out of about three hundred cases of which I have preserved a history in my note book, I have been at a loss to determine which, and how many, to select for illustration. The two above recorded are both extreme cases, and the majority lie between them, requiring less depletion than the first, and more than the second. There are, however, numerous cases which will bear neither bleeding nor feeding: slow in development, and sluggishly responding to medical treatment, they often weary both surgeon and patient, recurring again and again in all their original severity, after being nearly or quite well. In these cases we must leech with caution, but the patient must abstain from all alcoholic drinks and animal food. Means should be taken to relieve the vascular system by purgatives, diuretics, and diaphoretics in turn; but above all things the continuous use of antimony, in such doses as shall check the appetite, is indispensable during the acute stage.

The *local treatment* of eczema is of little consequence, provided we abstain from all unctuous preparations, which, however fresh when applied, speedily become decomposed by the heat and moisture of the skin, and thus set up a new source of irritation. Cold wet rags (moistened either in pure water, or in a weak alkaline solution when the discharge has an acid reaction) are most grateful to the patient and most favorable to his

recovery. They cannot be renewed too frequently in the day time, and at night they may be covered with oil silk to preserve their moisture. The prevention of the formation of crusts, next to the comfort of the patient, is the chief indication for local treatment. A soft sponge should be at hand in the case of infants, and with it the discharge should be frequently and tenderly mopped away every hour or two. As to curing idiopathic eczema by topical applications, the man who attempts it must indeed be ignorant of the tendencies of the disease. When eruptions of an eczematous character are produced by known exciting causes, or by mercury, or cubebs, or croton oil, or by the sun's rays, or other local irritants, they will commonly subside spontaneously shortly after the cause which excited them has been removed, or has ceased to act.

Aphtha, *thrush*. This well-known disease which properly belongs rather to the alimentary canal than to the skin has been placed by Willan among skin diseases in the order vesicula. It is not consistent with my plan to swell this little volume with dissertations on diseases which are fully expounded in every work on the practice of medicine. I therefore refrain from all further notice of this disease.

CHAPTER VIII.

ORDER VII.—TUBERCULA.

"TUBERCULUM (*tubercle*). *A small hard superficial tumour, circumscribed and permanent, or separating partially.*" This order comprises nine genera, viz., *phyma, verruca, molluscum, vitiligo, acne, sycosis, lupus, elephantiasis, frambæsia.*

PHYMA (a suppurating tumour), is the name given by Willan to a genus intended to comprise both *furunculi* (boils), and *anthraces* (carbuncles). It may likewise properly include the *hordeolum* or sty.

Diseases of this genus have recently attracted a large share of professional attention, on account of their having become epidemic throughout the civilized world. Boils, carbuncles, styes, and whitlows have prevailed, as is known to all practitioners of medicine, for the last ten years throughout the whole of Europe, and accounts of the prevalence of the "furunculoid epidemic," as it has been called, have likewise been received from the East Indies, from America, and from the Cape. It is difficult to account for it, but it is doubtless due to the same cause as the change of the general type of diseases from the sthenic to the asthenic character. The only way of ascertaining the statistics of this strange "exanthem" (as one author has named it), is an ex-

amination of the registered returns of the deaths from carbuncle, which of late years have increased many hundreds per cent. But the object of this work is to detail the diagnosis and treatment of these affections.

The *furunculus*, or *boil*, is a collection of purulent matter in the skin and subcutaneous tissues, larger than a pustule and smaller than an abscess. Locally, it requires no *treatment* except emollient poultices. In due time it will burst, discharge its contents, and heal readily. It may be opened with a lancet or left to itself; it matters little which course is adopted.

The *anthrax*, or true *carbuncle*, is also a collection of purulent matter, commencing in a small cutaneous tubercle, but often involving the cellular tissue to an unlimited extent.

Diagnosis. Besides its tendency to magnitude, there are other characteristics which distinguish it from the furuncle. The purulent matter secreted in carbuncle is much more thick and tenacious than that of boils, so that it does not pour out (after an incision) like the furuncular secretion, but exudes slowly and sluggishly. Moreover, the boil is one collection of matter, which empties itself at once when the boil bursts or is lanced; whereas the true carbuncle is many-celled. If the lips of the wound made by a free incision are immediately separated, the divided cells will be seen each full of pus, but walled in by hypertrophied tissue, which is discharging blood. The discharge is not only slow, but after the primary cells have been emptied others often form, spreading deeper and wider, until a tumour as large as a cricket ball has sometimes been formed, especially when the back is the seat of the disease. A carbuncle, like a boil, will appear on

almost any part of the body, from the scalp to the fingers and toes.

Prognosis. A large carbuncle is always a dangerous affair, especially in the aged and those whose health is shattered by intemperance, a residence in tropical climates, or other exhausting causes. Still, under careful management, hopes may always be entertained that the patient will do well.

Treatment. Until very recently the unanimous voice of the profession was in favour of an early, free, and even crucial incision, in all cases of carbuncle. But this is an age of querulous opinions and timid practice; and it has recently been proposed that nature should be allowed fair play, or at least that we be content with escharotics and mild treatment. Doubtless we do not positively know how nature will terminate a disease, if we always intérfere with the process; but our fathers knew—for they saw the process—the fatal process, and recorded it for our learning. There are three reasons why all carbuncles should be freely lanced. 1. It will often save the patient's life, by ridding him of an otherwise fatal source of irritation; 2. It will prevent that chronic induration of the parts, the result of previous inflammation, which is frequently seen remaining for many months after the tumour has been left to nature; 3. It prevents the absorption of pus, and all its known and unknown consequences. My own experience in carbuncle, which has been by no means small, confirms these views. I have had many cases occurring in the most unfavourable subjects,—among old West Indians and wine bibbers, among the intemperate, the half-starved, the weak, and the sickly: I adopt the old fashioned practice, making a free, crucial

incision, rather long than deep, so soon as I have reason to believe that matter is formed: and I have never lost a patient with carbuncle.

Much depends, however, on the after treatment, and perhaps still more upon the medical management of the case. The *local* treatment of the wound is suggested each day by the appearance of the wound itself; and no good surgeon will be at a loss whether to soothe by warm poultices, to stimulate by escharotics or terebinthine applications, to check the tendency to gangrene by charcoal, nitric acid, or other potent antiseptics,—or to make a second or third opening for the escape of matter.

The *constitutional* treatment is all-important. Before the discharge of matter, a smart purgative or two may be administered. Immediately after lancing the tumour, it will be necessary to put the patient on a full diet, and to ply him with quinine, aromatics, ammonia, or the mineral acids. These drugs, judiciously selected and combined as the daily varying symptoms indicate, will suffice, with a due supply of wine, turtle, or mock-turtle-soup, &c., to sustain the tone and strength of the system through a very extensive and severe sloughing process,—provided that each alternate day the patient's bowels are stimulated with a purgative consisting of at least five grains of calomel, and as many of the compound colocynth or aloetic pill as shall suffice to give full relief to the bowels. This attended to, the patient will scarcely fail to do well: this neglected, he will derive little benefit from tonics and over feeding.

HORDEOLUM, or *sty*, is a suppurating glandular

tumour at the margin of the eyelid, which in some subjects frequently recurs.

Treatment. Apply along the edge of the eyelid, every night for three or four nights, with a hair pencil, a solution of nitrate of silver, one scruple to the ounce. This will excite some degree of inflammation, a desquamation of the thickened epidermis will take place, and a new and healthy skin will be deposited. The sty, like the whitlow, has been a frequent symptom of the furunculoid epidemic.

Prophylactic treatment of furunculoid diseases. This will include boils, carbuncles, styes, and whitlows.* As these diseases must owe their existence, proximately, to a depraved condition of the circulating fluids, the right treatment can only be determined by ascertaining what that condition is, and what is the nature of that materies morbi which the system is so intent on eliminating by purulent discharges. To this end, a due examination of the secretions, and a close inquiry into the state of the organic functions, will occur to every practitioner as the *first* thing to be done; the *second*, to rectify what is wrong therein; the *third*, to give tone to the organic functions, and richness to the blood. Small doses of sulphuric acid, with sulphate of magnesia, and quinine, with or without the addition of sulphate of iron, will generally succeed in preventing the habitual formation of boils, small carbuncles, whitlows, and styes. In emaciated subjects, the cod-liver oil is the medicine; in the

* *Whitlows*, and their treatment, are fully described in works on general surgery. It may, however, be well to observe that the epidemic whitlow is generally only a superficial collection of sero-purulent matter under the epidermis around the finger nail. The proper treatment is not a poultice, but a spirituous evaporating lotion.

dyspeptic with uric acid diathesis, alkalies; in the plethoric and full-habited, active purgation.

VERRUCA; *warts*. These tuberculous growths, which appear to be little more than enlarged papillæ, covered with hardened and thickened cuticle, are too well known to require description.

Treatment. *Existing* warts are best destroyed by the repeated application of strong nitric acid, paring away the destroyed parts from time to time. The *tendency* to the production of warts, is a morbid condition analogous to the leprous cachexia. It will yield to a course of arsenic.

MOLLUSCUM. This term has been applied by various authors to certain superficial tumours containing a kind of sebaceous matter. No two cases of Molluscum are described alike, and no two authors are agreed about them in any point, except that they are rare and incurable. Dr. Bateman gives a case in which the disease appeared to be contagious.

Treatment. The specific action of arsenic upon the skin is so well established, that I should feel disposed to try a lengthened course of this medicine in Molluscum. Bateman speaks highly of its effects in diminishing the size and number of the tubercles. I have found it very useful in certain nondescript cutaneous tubercles, to which, however, I hesitate to give the name of Molluscum.

VITILIGO, *Veal-skin*. This is another disease concerning which writers differ much, one confounding it with lepra alphoides, another with lupus non-exedens from both of which it essentially differs. As far as I

have myself seen it, I should describe it as consisting generally of streaks, but sometimes of patches, on the surface of the body, perfectly white, smooth, polished, and non-pubescent, commonly depressed a little below the general surface, and sometimes surrounded by a tubercular scaly growth, which falls off, and leaves a white scarred surface. I have seen it in the neck, bosom, abdomen, thigh, and leg:—never in the face, which is the common seat of lupus. It also differs from lupus in many respects. The pale scars left by lupus non-exedens are not nearly so white nor so smooth, nor so regularly formed, as the streaks and patches of vitiligo, nor do they appear until after the disease has run a certain course: but the white marks of vitiligo are seen in the first instance, the tubercular eruption appearing subsequently. I know of no certain remedy for vitiligo, but I am trying arsenic in two cases. In one of them it has as yet produced no change, in the other it is certainly effecting a very satisfactory improvement.

ACNE is a disease of the sebaceous glands, consisting of a process of sluggish inflammation in these organs, tending slowly to suppuration. It commences with clusters of small tubercles, or pimples, with conoidal summits, which, having slowly completed their suppurative course, discharge their contents, die away, and give place to others. Willan speaks of four varieties—*Acne simplex*, *Acne punctata*, *Acne indurata*, and *Acne rosacea*. The first three more correctly describe the different stages of Acne simplex than different species. The latter (Acne rosacea) has a distinct character.

Acne simplex commences with small elevations in the [illegible], of a red colour, on an inflamed base, which

slowly secrete a dense purulent matter. Clusters of these pimples, with conoidal acuminated summits, varying in colour, red, yellow, or black, are often seen disfiguring the face of young persons at the age of puberty. The disease is generally confined to the face, neck, shoulders, and the upper part of the breast; it is most common in the forehead and chin. The eruption, if left to itself, gets better and worse, but generally lasts from two to seven years, commonly disappearing at mature age, but occasionally continuing for several years beyond. Nor has it always been found an easy task to arrest the progress of the unwelcome visitor. Lotions of a stimulating kind, such as sulphur triturated with camphor and water, or a weak solution of the bichloride of mercury, appear serviceable for a time, but rarely or never prove of permanent benefit.

The perils attending the usual mode of administering arsenic had formerly presented a sufficient objection to its use in a disease attended with no danger and little inconvenience. But a long experience of the absolute safety of decreasing doses, and of the power of the medicine over cutaneous affections generally, suggested to my mind, many years ago, the propriety of testing its efficacy in acne. The large opportunities of trial which have since presented themselves, have confirmed me in the opinion that acne may be cured by persevering in small doses for a few months, provided the system be otherwise in health. The following cases will afford a sample of the general results:—

Case 33.—*Acne Simplex on the face, cured by arsenic.*

A. B., a pretty servant-girl, aged nineteen, had been for

three or four years disfigured by an eruption of acne simplex, in its various stages, on the forehead, chin, upper lip, and cheeks. Her general health was excellent. Arsenic was prescribed for her on the 30th of Sept., 1845.

Oct. 21st, 1845.—She has taken five minims of the liquor potassæ arsenitis thrice a-day with her meals, steadily, for three weeks, and her face is now quite clear of pimples, excepting one or two, which have not had time to run their usual course. No fresh elevations have appeared for a week. The conjunctiva is not affected.

CASE 34.—*Acne Indurata on the shoulders, cured by arsenic.*

Miss N., aged twenty-one, has an extensive eruption of solid tubercles, surmounted by pustules, answering to the appearance described by Willan as marking the variety called acne indurata, on the skin covering the deltoid muscle in each arm, and extending partially across the back. The pustules are occasionally sore, and irritated by the dress, and are always unsightly. The disease has existed nearly seven years. She is in good health. The face is clear, and the complexion healthy.

Nov. 25th, 1844.—The eruption is copious on both shoulders. Five minims of the solution of arsenic were prescribed to be taken three times a-day with the meals, and an occasional purgative, her bowels being constipated. This was persevered in for three months, without inconvenience on the one hand, or visible improvement on the other.

March 10th, 1845.—She has now taken the medicine for three months and a fortnight, and a great improvement has been visible during the last fortnight. No new pustules have formed, and the old ones look indolent and fading. The conjunctiva is inflamed. The arsenic to be continued in reduced doses, and a lotion of bichloride of mercury applied sparingly.

May 6th.—She continues to improve. The pimples are small, and appear to partake more of the character of enlarged papillæ than of pustules.

July 2nd.—Quite well; the shoulders are as smooth as other parts of the surface.

The appearance of acne in young females has been supposed to indicate some abnormal condition of the

uterine secretion. My experience has not tended to confirm this opinion. In both of the cases above detailed, the menstruation was perfect and regular throughout, and the first appearance of the discharge seemed to have no influence over the eruption.

CASE 35.—*Acne Punctata subdued by arsenic.*

Miss S., a young lady of nineteen, in good general health, has been affected with an eruption of acne punctata in the face and forehead for about eighteen months. She consulted me.

Sept. 11th, 1846.—The pustules are in every stage of advancement and decline, some red and swollen, others with yellow heads, and some dying away, showing black central points. Five minims of Fowler's solution were administered thrice a-day after the meals.

28th.—There is a decided improvement in the appearance of the face; the eyes are slightly affected. Continue the arsenic in doses of four minims.

The patient returned home at this date, and her medical attendant kindly undertook to persevere with the medicine. About six weeks subsequently, he wrote to me, informing me that "Miss S. is persevering most diligently with the liquor potassæ arsenitis, and is still deriving benefit."

I have most distinctly stated that where organic disease is present, or where the general health is impaired from causes wholly independent of the cutaneous disease, no advantage can be expected from arsenic, unless the health can be previously rectified. The following case illustrates this.

CASE. 36.—*Acne Punctata in a young girl resisting the agency of arsenic, from latent pulmonary disease, which proved fatal.*

Miss D., aged 18, has never menstruated, nor suffered any obvious inconvenience from that circumstance; has had impaired health during the past winter and spring, but is now apparently in good health.

Oct. 20th, 1845.—Pulse and tongue natural, appetite

good, bowels regular: but there is an ugly eruption of acne punctata, presenting a number of dirty-looking acuminated points, more or less inflamed around the base, extending over the forehead, lips, chin, nose, and cheeks. It has existed upwards of three years. She is juvenile in appearance, and is scarcely a subject for the preparations of iron or other emmenagogues. Take of Fowler's solution one dram, distilled water seven drachms, mix. Take forty minims thrice a-day with the food. Apply a lotion of bichloride of mercury to the face.

Nov. 20th.—She has persevered for a month, but there is no improvement. No conjunctivitis. Take fifty minims for a dose, and discontinue the lotion, which only inflames the skin.

29th.—No improvement. Continue the arsenic, and the lotion much diluted.

Dec. 2nd.—She complains of a slight degree of weakness in the eyes. Conjunctiva slightly reddened on the fleshy reflection: eruption less indolent, spots reduced in number.

6th.—Eruption much better. Conjunctiva no worse. Persist in the arsenic.

11th.—Eruption still fading: conjunctiva inflamed. Take thirty drops instead of fifty. Continue the lotion.

I now lost sight of my patient, but early in the spring, symptoms of phthisis supervened, which carried her off in the autumn, the eruption appearing and disappearing several times, but as distinct as ever for a few weeks previous to her dissolution.

Observant practitioners have noticed that acne is not unfrequently complicated with disease of the lungs. This is the only case in which I have met with this complication.

Acne rosacea is an inveterate form of acne simplex, but it differs much from that disease in some particulars. Instead of appearing at the age of adolescence, it belongs rather to the decline of life, commencing at, or shortly before, the middle period; and instead of spontaneously disappearing after a time, it usually gets worse and worse (unless checked by

medical treatment) till death. The locality of acne rosacea is also peculiar. Instead of appearing in the forehead and chin, its seat and centre is almost invariably the nose, from which it radiates laterally, gradually extending over the cheeks, and affecting the adjacent skin in all directions. The point of the nose first becomes redder than natural, especially after meals, or on exposure to cold or heat; the veins of the part become visible, then tubercles or pustules form, and slowly progressing through their stages, leave the skin permanently thicker than natural, and puckered with small cicatrices. In its advanced stages, the disease sometimes disfigures the face to a frightful extent; and being, in not a few cases, the penalty of dram-drinking, it becomes particularly afflictive to the temperate, in whom, however, it is at least as common. Like other forms of acne, it attacks both sexes, and occasionally occurs as a degeneration of acne indurata of long standing. But the subjects of acne simplex are commonly exempt from acne rosacea.

The treatment of acne rosacea has been hitherto unsatisfactory in its general results. Rayer says, the disease "almost always returns after medicines are abandoned, with a rapidity and regularity that induce despair."* This is strong language, and from a man of Rayer's experience, most discouraging. Indeed, so general is the impression that it is incurable, that patients rarely seek medical advice for this disease, and still more rarely do regular practitioners undertake the cure in a methodical or persevering manner. Certainly, among the numerous and ill-defined varieties of this disease, there are two the recovery of which

* Rayer's "Treatise on Diseases of the Skin", English translation, p. 476.

cannot be reasonably expected. 1. The disease is in some cases hereditary, and, perhaps, likewise congenital. Early in life the nose is slightly affected by the disease, and by degrees becomes incurably hypertrophied and deformed. The writer has more than once known it complicated with an irritable condition of the rectum and with chronic hæmorrhoidal affections, the irritation oscillating from one extremity of the intestinal tube to the other. These disorders can be *alleviated* by medical treatment, but there is something originally wrong, which probably can never be rectified. 2. The acne rosacea of the drunkard, connected frequently with visceral disease, is placed by the habits of the patient, so long as he persists in them, out of the control of medical art. With these two exceptions, the varieties of acne rosacea present nothing which justifies an unfavourable prognosis, much less despair.

The following "very instructive case", as Dr. Chambers described it, furnishes a proof, which cannot be impugned, of the therapeutic powers of arsenic in this disease.

Case 37.—*Acne Rosacea in a middle-aged lady, cured by arsenic.*

The landlady of a large hotel, middle-aged, of temperate habits, clear complexion, and good general health, had been complaining for some weeks of languor, lassitude, headache, hysterical globus, and chronic diarrhœa. These symptoms were treated variously, but with little success for a time. At length, on the right ala of the nose, a small number of acuminated pustules appeared, elevated upon an inflamed base, and having the genuine character of acne, but more closely crowded together than they usually are in that disease. These soon became covered with a purulent incrustation: other pustules appeared in the neighbourhood,

until at length the whole ala, with a contiguous portion of the cheek, became occupied by the disease, and presented an ugly and hypertrophied appearance. As a portion of the crust became separated, other pustules appeared underneath, and a second crust was formed, which, when detached, discovered other formations, on a larger base, and involving a deeper portion of the subcutaneous tissue. There was no pain or itching, and, except on approaching the fire, no sensation of heat. The crusts were surrounded by a small areola of a dull red-colour, rather inclined to a brown shade, but never exhibiting the livid colour of lupus, which disease it nevertheless, in some respects, resembled.

Dr. Chambers saw the case within two or three months of its commencement. He pronounced it acne rosacea, gave a guarded prognosis, and prescribed arsenic, of which the first dose was taken on the 3rd of January, 1844, and continued, on the plan detailed in the preceding cases, for three months, by which time the disease had entirely vanished, and the hypertrophied cellular tissue was reduced to its normal condition. Any doubt which might have been entertained concerning the agency of the arsenic in the cure would have been dissipated by the ultimate history of the case. The patient now left her home "for a week"—was actually absent five weeks, neglected her medicine, and returned home with another tuberculous incrustation, which, commencing on the original spot, had now spread more horizontally over the cheek, but seemed to take a more superficial hold of the integuments than the former attack.

May 10th.—The arsenic was now resumed, and taken steadily, till the middle of July. Before the end of May, however, the disease had again disappeared. The medicine was persisted in for two months subsequently, with a view to prevent a return; notwithstanding which precaution, the disease was only kept at bay for twelve months, not radically cured; for in the following July, 1845, the old enemy reappeared, evidently, however, in a milder form than heretofore; for now the arsenic put him to flight in ten days, and was steadily persevered in for two months afterwards. At present, there appears no probability of a relapse. A considerable indentation, like a bad variolous scar, was left by the first attack; the latter attacks left no scar.

The diarrhœa, headaches, and hysterical affections, retired as soon as the arsenic had hold of the system; and the patient has enjoyed excellent health since the termination of the first course. The conjunctiva became affected, as usual, synchronously with the subsidence of diseased action, both local and constitutional. No external application was used, nor any potent internal medicine, after the first exhibition of the arsenic.

The reader's attention is particularly solicited to three observations suggested by this interesting case:—1. The decline of the disease, on three distinct occasions, under the steady use of arsenic alone, independent of external applications, changes in diet, or other circumstances of regimen; its repeated relapses after neglecting the medicine for a few weeks, and its (probably) final disappearance, after such a protracted course of reduced doses as seemed to destroy the very tendency to morbid action: these circumstances demonstrate the absolute control which this wonderful medicine exercises over tubercular diseases of the skin, and holds out a strong encouragement for its lengthened trial in cases of longer standing. 2. The morbid condition of the nervous system, and the extreme irritability of the intestinal canal, in circumstances which would generally be held interdictory of the use of arsenic, were, in this case, not less clearly relieved by the arsenic than the cutaneous disease itself. 3. The resemblance of this case to lupus, both in the locality primarily affected, and in some similarity of general appearance and history not easily described, seems to suggest, if not establish, some relation between this disease and certain forms of acne rosacea; and if it throws no light on their cause and origin, it indicates a morbid condition of the general system, susceptible

of successful treatment by a similar alterative plan. The writer has further the satisfaction to state that he has had many opportunities of carrying out this indication with the most entire success, in cases of lupus exedens, of many years' standing, the particulars of some of which will hereafter be presented to the reader.

Case 38.—*Acne Rosacea in a reformed drunkard, cured by arsenic.*

G. W., aged 32, formerly an intemperate man, presented himself at the dispensary with the usual appearance of acne rosacea. The disease had existed six months.

Sept. 30th, 1853.—The nose and cheeks are studded with red tubercles, more or less disposed to suppurate; general health good. Ten minims of De Valangin's solution were ordered to be taken thrice a-day, and a dose of aperient pills thrice a-week.

Dec. 30th.—He has persevered in the medicine for three months, and the tubercles have wholly disappeared. Discharged, cured.

Case 39.—*Acne Rosacea after Small Pox, much benefited by arsenic.*

C. B., an unhealthy man, applied for the cure of acne rosacea in the nose, which followed an attack of small-pox, and had existed ten years.

Nov. 22nd, 1853.—The nose has a red appearance, produced in part by the tubercles of acne, and in part by an enlargement of the capillaries of the skin which usually attends protracted cases. He complained of palpitatio cordis, dyspnœa, and coldness of the extremities, but presented no physical signs of disease. He was treated with arsenic and gentle purgatives as detailed in the former case. His extremities soon became warmer, and the redness and pimples gradually became paler.

Jan. 3rd, 1854. Much improved both in health and appearance. Persevere.

Feb. 3rd.—Still continues to improve. Bowels costive. Persevere with the arsenic, and take the compound camboge pill at night.

April 15th, 1856.—He reports that he was nearly well and neglected his medicine. The disease has gradually returned. He was recommended to resume the medicine. He then absented himself from the dispensary, probably cured.

A large majority of the cases of acne rosacea, which have been treated at the dispensary, have been complicated with symptoms of general ill-health, and not a few with organic disease. When the health is good, the disease will as regularly yield to arsenic as other forms of acne, though more slowly.

SYCOSIS. "An eruption of inflamed, but not very hard tubercles, occurring on the bearded portion of the face and on the scalp, in adults, and usually clustering together in irregular patches."

Dr. Willan, adopting the views of Celsus, divides this disease into two species, the one attacking the bearded portion of the face, (*sycosis menti*), the other affecting the scalp (*sycosis capillitii*).

Sycosis menti. The tubercles of sycosis menti may attack any portion of the upper or lower lip, or of the bearded portion of the face. The primary appearance is that of red conoidal pimples nearly as large as a pea. In a week or ten days, (sometimes sooner) they suppurate slowly, discharging a viscid pus by which the hairs are matted together, producing a crust sometimes shewing a similarity to the inside of a fig; hence its name. The eruption renders shaving painful or impossible, and often itches much. It is occasionally ephemeral and recurrent, but more frequently it assumes a chronic form, one patch of tubercles succeeding another for months or years together. The health of the patient is rarely vigorous, and the disease is

decidedly constitutional. Women are subject to it as well as men, but in them it is much milder, and less disfiguring.

Diagnosis. It may be distinguished from acne indurata by its seat, by the softer, more numerous, and more closely clustered tubercles, and by their tendency to ulceration and crusts. Also by the age of the patient, always adult and generally mature.

Prognosis. Sycosis menti is always curable, provided the health can be restored and maintained; otherwise it may recur frequently.

Treatment. Local treatment is unnecessary and generally useless. When the patient is emaciated and weak, cod-liver oil acts like a specific. When the health is little affected, arsenic acts with its wonted efficiency. When the health cannot be restored by medicine, change of air (particularly from the city to the country) is often all-sufficient. Whether this acts by correcting the dyspepsia which is often the cause of the eruption, or by the respiration of a purer atmosphere, is not easy to determine.

The following cases will shew the efficacy of cod-liver oil in this disease :—

CASE 40.—*Sycosis, cured by cod-liver oil and arsenic.*

J. F., aged 38, had suffered for two years from a tubercular eruption affecting nearly the whole of the bearded portion of the face, and rendering it impossible for him to shave. His employment was within doors, and he looked pale and worn. He applied for relief at the dispensary,

Jan. 2nd, 1855.—He is somewhat weak and wasted of late, and has a slight cough, but there are no physical signs of pulmonary disease. He reported that he had formerly taken arsenic, which cured the disease, but, as he imagines, injured his health, and reduced his strength. A teaspoonful of Dr. De Jongh's cod-liver oil was ordered to

be taken thrice a-day after a meal, and no other medicine.

Feb. 6.—Up to this time there has been a rapid improvement, but during the last few days there has been a relapse of the disease. The dose of the oil to be doubled, and ten grains of the pil. rhei. comp. to be taken every other night.

March 13th.—Improving very fast. He can use his razor with comfort. The oil agrees with him, and he is rapidly gaining flesh and strength, and looks better. The dose of oil to be again doubled, and the pills continued.

April 14.—The original disease is well, but he is troubled with boils on the side of the face and elsewhere. The dose of oil to be reduced one-half, and a mild tonic substituted.

May 8th.—Tubercular eruption returned. Bowels costive. Continue the oil, take some cathartic pills, and discontinue the tonic.

29th.—The disease varies. Continue the oil, and take ten minims of the liq. arsen. chlorid. with each dose.

June 12.—Face nearly well; slight conjunctivitis. Reduce the dose of liq. chloridi to seven minims.

July 3.—Eyes still weak; scarcely any disease remains. Reduce the dose to five minims. Continue the oil.

The patient has not attended since the last date, and there is little room to doubt that he continues quite well, and is mainly indebted to the cod-liver oil for his recovery.

The following case is even more satisfactory:—

CASE 41.—*Sycosis, cured by cod-liver oil.*

C. W., aged 21, had been troubled with sycosis one year, in circular patches round the chin.

June 29th, 1855.—His health is good. Take a teaspoonful of Dr. De Jongh's cod-liver oil three times a-day, after meals, and ten grains of comp. rhubarb pill every other night.

August 31st.—He has persevered steadily for two months, and the disease has entirely disappeared.

CASE 42.—*Sycosis.*

W. S., aged 30, of pale, phlegmatic habit, and red hair. Both the upper and lower lip have been affected for eighteen months, and he has got no relief from medical treatment.

July 3rd, 1855.—Health tolerable, but the patient is weak and wasted. The cod-liver oil was prescribed in tea-spoonful doses, and an aperient, if required.

Sept. 4th.—His health, strength, and flesh are restored; but the disease is not much better. He was now ordered to desist from the oil, and to take Fowler's solution, which cured him.

CASE 43.—*Sycosis Menti.*

E. M., aged 38. In this case the disease had existed, "on and off," for fourteen years. The patient's health being good, he took the cod-liver oil alone for two months, with a very steady improvement. He then absented himself, probably cured.

CASE 44.—*Sycosis Menti.*

T. T., aged 24, had the disease formerly for six months, and got a spontaneous recovery (as often occurs), by removing into the country. Since his return to town, the eruption has broken out afresh. Health good, but he is somewhat wasted. Took the oil for a month with decided benefit, and he was nearly well when he last applied.

CASE 45.—*Sycosis Menti.*

J. C., aged 62. Upper lip affected for four years. Health good, but he has wasted of late, and has lost strength. Bowels costive. Took the oil for one month, with an occasional aperient, and is believed to have recovered.

The efficacy of arsenic in sycosis is illustrated in the following:—

CASE 46.—*Sycosis cured by arsenic.*

A. J., aged 27, in apparently good health, but found himself short-breathed before the eruption made its appearance, three years ago.

June 24th, 1853.—The disease appears both on the upper lip and chin in its usual character. Ordered to take ten minims of the liq. arsen. chlor. ter in dic, and pil. cambogiæ comp. with pil. hydrarg., of each five grains, every other night. The disease gradually declined. He took the arsenic pretty regularly for about a year, after which

the disease gave him no trouble and gradually disappeared. By paying due attention to the bowels he has escaped the dyspnœa to which he was formerly subject.

CASE 47.—*Sycosis in a lady, complicated with Neuralgia; both affections cured by arsenic.*

Miss S., aged 25, (or upwards,) a brunette, of naturally clear complexion, had suffered from frequent attacks of neuralgia in the facial nerves. Early in the summer of 1844, she experienced a return of her old malady, which destroyed her rest, except when procured by opiates. The chin and lower parts of the face generally, then became affected with a sense of heat, tension, and pruritus, which sensa tions were in a day or two succeeded by an eruption of small red points, tending to suppuration somewhat more rapidly than usually occurs in acne simplex, and the subcutaneous integuments were more or less involved in the inflammatory process. The forehead and the nose wholly escaped the disease.

June 21st, 1844.—The eruption has existed about three months, and has continued by successive crops to this time, gradually getting more troublesome. The patient is weak and thin, and is suffering from extraneous causes of anxiety; but the general health is otherwise good, and there is no interruption of any natural function. She this day consulted the writer on accouut of the neuralgic affection. No external application was used, but the following medicine was prescribed—viz., Fowler's solution, one drachm; distilled water, seven drachms; mix. Forty minims to be taken twice a-day in the beverage usually taken at meals.

June 30th.—The pain has left her. She sleeps well, and is looking better. The eruption is fading, and the skin is paler and less occupied by red points. Slight conjunctivitis. The dose of arsenic was reduced to four, and afterwards to three minims of Fowler's solution.

August 1st.—The eruption has quite disappeared. She has had no relapse of the neuralgic pain, and is in perfect health.

CASE 48.—*Sycosis in a female, complicated with Dyspepsia; both diseases yielding to arsenical treatment.*

Miss T., aged 27. The eruption in this case was so

exactly similar to the one just described, (except that it was confined to the point of the chin,) as to render further description unnecessary. The dyspepsia was treated with aperients and alkaline tonics for a fortnight, and a diluted solution of bichloride of mercury applied to the face, without any amendment becoming apparent in the eruption, and with but little improvement in the dyspeptic symptoms.

The arsenical treatment was commenced on the 11th of August, 1845, and in little more than a week the stomach had resumed its healthy tone, and the skin was nearly well; but she neglected the medicine, and before the following Christmas, both complaints returned, and have again yielded to arsenic.

Both of these patients were of mature age, and had been free from the cutaneous affection at the age of puberty. The skin of the forehead was sound, and the disease was somewhat more acute in its character than acne simplex. It commenced too early in life for acne rosacea; besides which, the nose escaped entirely. In both cases, the disease, with its respective complications, yielded readily to arsenic. Not a doubt can be entertained of the constitutional origin of sycosis, whether it occur in the female or in the male sex. The *sycosis* capillitii is amenable to similar treatment.

LUPUS is the next genus of the order *Tubercula;* and is characterized by Willan as including, "*Noli me tangere,* affecting the nose and lips, and *other slow tubercular affections,* especially about the face, commonly ending in ragged ulceration of the cheeks, forehead, eyelids, and lips; and sometimes occurring in other parts of the body, where they gradually destroy the skin, and muscular parts, to a considerable depth."

This disease has many names, and the cognomen *lupus* is applied by authors to two or three different

diseases, or varieties. Bateman describes but one form of lupus, Rayer two, and Biett three. Of these, Rayer's division is the best, and his description of the disease is more happy that Willan's, and so graphical and correct, that I shall quote it verbatim.

"Lupus is a chronic cutaneous inflammation, which usually appears in the shape of external tubercles of different sizes, singly or in clusters, of a livid colour, and indolent character, followed either by ichorous and phagedenic ulcers, which become covered with brownish, and usually very adherent scabs,—lupus *exedens*; or by extensive changes in the structure of the skin, but without preliminary or consecutive ulceration,—lupus *non exedens*." When the disease appears in elevated patches, Biett places it in his third division under the name of lupus *with hypertrophy*.

Lupus exedens is a frightful disease, not easily cured, and when cured leaving behind it more or less of deformity. As its name implies, it is an ulcerating disease of the phagedenic kind, showing no spontaneous tendency to healing, or to the restoration of the affected parts. It most frequently ulcerates deeply without spreading rapidly in a lateral direction: in other cases, it spreads superficially, just destroying the cutis, leaving the subcutaneous tissue untouched, but extending its ravages laterally in all directions. The origin of the disease is always obscure. It seldom comes under the eye of the surgeon until it has existed for a considerable time, and by its slow insidious advances has destroyed for ever some portion of the integuments. And in fact such is the deceptive mode of its approach, that the surgeon is almost as liable as the patient to mistake it in the first instance for

a trifling and ephemeral disease. Whenever a young female complains of a sore spot within the ala of the nose, or on the septum, or exhibits an adherent scab of ever so small dimensions, situated on the top or side of the nose, or on the lip, surrounded by a base of a livid colour;—a close examination should be instituted. If the disease should prove to be lupus, it will not only be found more difficult of cure if it be allowed to take a protracted course, but a few months delay will be productive of more or less deformity, and the beauty of the patient will be irrecoverably lost. It therefore behoves every practitioner to study well the characteristics of the disease. It consists of a chronic tubercular inflammation of a peculiar character, at once indolent and irritable, but often for a time devoid of pain; of a livid colour, commencing generally in a small portion of the ala of the nose or the circumference of the nostril, and speedily tending to phagedenic ulceration. The ulcers are covered by dirty-looking adherent scabs, which, on desquamation, discover a surface moistened by a glutinous exudation, soon drying into a new scab; and this, on its separation, disclosing deeper excavations, until not only the subcutaneous tissues, but eventually the cartilaginous structure of the nose is eaten into. The disease often extends to the lips and gums. The whole of the nose, upper lip, lower lip, cheek, eyelids, gums, and even portions of the bone, have been known to be sacrificed to the ruthless invader. The lower eyelid and the commissures of the lips are sometimes respectively the seat of lupus exedens, the ravages of which produce suffering and deformity not less deplorable than lupus of the nose.

The *causes* of this horrible disease are utterly unknown. Its subjects are commonly young and previously healthy women, from the age of sixteen to thirty.

The *diagnosis* is not difficult; but through the too general neglect of the study of cutaneous pathology, and the consequent ignorance of the symptoms of well-defined and specific diseases, the repulsive malady has very often been most inexcusably confounded with syphilis, and the disease has been aggravated by mercury. In syphilis there can always be traced, at least, a concatenation of the secondary symptoms previously developed, and the disease usually commences from within; the cartilages suffering first; and the ulceration, when it appears, has a character of its own, quickly appreciated by the experienced eye. In lupus, on the contrary, the disease appears in persons who have generally enjoyed good health, and in whom neither primary nor secondary symptons have ever appeared: it first invades the skin, which is not copper-coloured, but livid.

The *prognosis* was once as melancholy as the disease is horrible. When the writer's attention was first called to this disease, he sought in vain, both in books and hospitals, for a single case in which its ravages had been actually and permanently arrested.

He can now, however, confidently assure the patient, provided she has not passed the meridian of life, that the ulceration can be stopped, the ravages of the disease arrested, the pain entirely relieved, and frequently the skin will become perfectly sound, shewing only the loss of substance, which can never be restored.

Treatment. This is precisely the same as in sycosis.

In strumous subjects, cod-liver oil, taken internally, has been known to heal up the ulcers. In healthy subjects, arsenic, internally administered, is a specific. No local treatment is required. It was formerly the custom to burn away the surface of the ulcers, and I regret to say that this cruel, barbarous, and utterly useless practice is not quite obsolete. These are hard words, but they will give much less pain than many patients have needlessly suffered under this useless treatment. The following cases will prove that this language is not too strong, inasmuch as they will show that the disease will yield to medicine, without any topical appliance whatever, whereas I have never seen nor heard of a single case cured by escharotics alone.

The following case will show that the disease may not only be arrested and reproduced at pleasure, during a certain time, but permanently and radically cured:—

CASE 49.—*Lupus Exedens of nine years standing, cured by arsenic.*

Mrs. S., aged 32, the wife of an agricultural labourer, had been the subject of lupus exedens for nine years, when she first requested my advice. The disease had probably been mistaken for syphilis, for she had twice been salivated, (of course without benefit,) and had submitted to escharotic applications, and a variety of treatment, both in hospital and private practice, without the slightest advantage. She had been under the care of the late Mr. Earle, in St. Bartholomew's Hospital, for twenty-two weeks, and reports that she was there treated with sarsaparilla and caustic. The wounds of the nose were once healed by external applications, when the roof of the mouth and gums were attacked, and she lost four teeth as the penalty for submitting to *local* treatment.

Jan. 5th, 1837.—The tip, both alæ, and a part of the septum of the nose, are already eaten away. A portion of the upper lip and of the gums of the upper jaw have disappeared, and the four incisors of the upper jaw

have been sacrificed. The remaining portion of the extremity of the nose, the upper lip, frænum, and gums, are in a state of ulceration, and the parts exposed to the air are covered with a dirty, dark-looking incrustation, the edges of which are of a dull livid colour. The breath is offensive, indicating deep-seated mischief; she has a nasal tone of voice, and there is reason to suspect the existence of a greater extent of disease than is obvious to the eye. She complains of severe burning pain in the seat of the disease, and is "troubled to get any rest." She is emaciated and weak, but otherwise in good health. The parts were ordered to be dressed by a pledget of pure fresh spermaceti cerate, thinly spread upon fine lint, simply to protect them from the oxygen of the atmosphere, and from sudden changes of temperature, no other application being used. Five minims of the liquor arsenicalis were ordered to be taken with the meals thrice a-day, which dose was persisted in with exact regularity for three months, when the conjunctiva became affected. The dose was then and afterwards reduced as occasion required. This plan was uninterruptedly pursued for *two whole years*, the disease, meanwhile, *advancing as heretofore*, but she at length experienced some alleviation of the pain. *The action of arsenic is slow but sure.*

Jan. 30th, 1839.—She has now lost all pain, has regained her flesh, spirits, and good looks, and has undisturbed rest, but *there is no appreciable improvement in the ulcerated surfaces.* The disease has committed visible ravages since the commencement of the arsenical treatment, but the patient fancies it has been "at a stand-still" for the last few weeks.

Jan. 12th, 1840.—She has now steadily persevered in the arsenic *for three years.* The conjunctiva has been more inflamed "latterly," but the skin of the nose, lips, and gums, is perfectly whole and sound. *No traces of ulceration or scaliness are visible,* but there are ugly cicatrices and scars, with great loss of substance, and the contaminated breath suggests the idea of disorganized cartilaginous structure.

March 2nd.—There is no visible trace of existing disease in the nose, lips, or gums, but the breath is still offensive. She thinks she has taken cold, and complains of pain in the chest, dyspnœa, and hard dry cough. There is a croupy

hoarseness, as well as a nasal intonation in her voice. Pulse 96, firm; skin hot and dry. Fourteen ounces of blood were taken from the arm; aperients, salines, and low diet; discontinue the arsenic.

April 10th.—Quite well, with the exception of foul breath, and nasal tone of voice. No medicine prescribed.

Aug. 3rd.—She has taken no arsenic for five months. There is a slight return of ulceration in the right side of the nostril, but the livid appearance of the skin, and the foul unhealthy character of the ulcer, are not so obvious as before. A small tuberculous elevation also appeared on the left cheek near the nose, which healed after being touched with nitrate of silver. The arsenic was now resumed in small doses, and continued regularly for a month.

Sept. 5th.—The skin is again healed, and has a normal surface.

Jan. 1841.—She has continued in excellent health for four months, and taken the arsenic till this time. It was now considered safe to dispense with it altogether.

July.—She has taken no arsenic for the last six months. Slight return of ulceration in the nose. Resume the arsenic in doses of two minims of Fowler's solution three times a-day. The ulcerated portion of the skin healed in ten days, and the arsenic was ordered to be taken for six months longer, which order was faithfully obeyed.

Jan. 1844.—She has now abandoned the arsenic for nearly two years. There is no return of the disease, but the breath is still offensive.

Jan. 1847.—The patient remains well; much less fœtor in the breath.

After this patient had taken the arsenic about twelve months, a brown, dirty, and mottled appearance of the skin was observable, first, on the legs and thighs, then, at the end of the second year, on the trunk of the body, and ultimately on the arms and neck, the face only escaping. This disappeared gradually, without desquamation, after the medicine was abandoned.

In this extraordinary and highly satisfactory case, the controlling power of the arsenic is so perfectly demonstrated by repeated experiments,—the disease uniformly advancing when the medicine was withheld,

and as uniformly receding under its influence, until the very tendency to deceased action was absolutely destroyed under its continued use,—that no comment can add any force to the facts.

CASE 50.—*Lupus Exedens of nearly twenty-four years duration, arrested by arsenic in six weeks; relapsing on the discontinuance of the medicine, and again arrested under its resumption, and finally cured.*

Miss F., a young lady of somewhat delicate organization, but originally healthy constitution, perceived on the 16th of March, 1823, being then in her sixteenth year, a soreness in the left nostril, which upon examination was found to arise from a small tubercular incrustation, on the left side, and within the nostril. An eminent surgeon being consulted, pronounced it a trifling affection, and applied lunar caustic, and subsequently some preparation of arsenic, with only temporary success. The disease advanced by slow and almost imperceptible degrees along the inner surface of the nostril for about two years. It then attacked the outside of the nose, and a tubercle became visible on the left ala. The disease soon afterwards appeared on the septum, then on the tip of the nose, subsequently and consecutively on the right ala, within and without, on the lower part of the nose, on the right and left cheek, the upper lip and the right eye, until its ravages, after twenty-four years of indolent and tardy, but never-ceasing advance, have undermined the health of the patient as well as produced deplorable deformity. She has likewise been occasionally afflicted with a papular eruption, attended with severe pruritus. This has appeared in various places, whenever the system has been exhausted by any cause.

July 21st, 1846.—With the cordial concurrence of her medical friends, who were in despair of affording her relief, she placed herself under my care. The tip of the nose is partially eaten away, and what remains is almost covered with a dirty-looking, adherent incrustation, which extends to the cheeks on either side, and to the upper lip, which is also swollen. The fleshy portion of the septum has entirely disappeared, and the interior of the nares is excavated in all directions: half of the left ala is gone; the end of the nose has fallen in for want of support, the alæ are both

pared quite thin, and the whole external surface is of a livid colour, assuming a deeper hue on exposure to heat or cold, or any exciting cause. The cartilaginous and osseous portions of the septum have happily escaped, but the nose is stuffed with a glutinous adherent incrustation, which prevents the admission of air in the act of inspiration. The outer canthus of the right eye has been affected for twenty years; it is permanently red and painful; the vessels of the conjunctiva are dilated, presenting an appearance resembling ecchymosis; and the eye-lashes are partially inverted, creating constant irritation. The left eye is sound. The whole of the diseased parts are exceedingly painful, and have been so for years, especially during the winter season, when she is obliged to confine herself to the house, as the disease has been invariably aggravated and rendered intolerably painful by exposure to the cold air. The general health is materially impaired, and although the vascular functions are performed with tolerable regularity, the nervous system has suffered severely. She complains of oppression at the precordia, palpitation of the heart under the most trifling excitement, tremors, debility, restless nights, depression of spirits, amounting to settled but resigned despair, and a dread of society, most foreign to her naturally cheerful and even sprightly disposition. She has an irritable, frequent, hæmorrhagic pulse, a clean tongue, and a pallid surface. She is much reduced in flesh and strength; but her appetite is not destroyed. Take of Fowler's solution of arsenic one drachm, distilled water seven drachms: mix. Let forty minims be taken three times a day, immediately after a meal.

Aug. 21st.—She has taken the medicine steadily for a month, has once complained of nausea which subsided in two days, and of several evanescent affections of the nervous system, all supposed to be the effect of the medicine, but subsiding spontaneously under its continued use. She has likewise an attack of catarrh, which is not allowed to interfere with the course. The eyes are both inflamed, but whether from cold or from the medicine, does not appear very evident. The external appearance of the disease is certainly improved, and the patient complains of less pain.

Sept. 1st.—She has now taken the medicine nearly six weeks. The catarrh has left her: *the right eye is better;*

the conjunctiva of the left eye inflamed considerably. The disease is much better: the internal nares nearly healed, the external surface no longer inflamed: several of the crusts have fallen off, exposing a healthy cuticular surface: but still she complains of debility and exhaustion.

15th.—Conjunctivæ of both eyes inflamed and painful. The disease has been vanishing most rapidly for the last fortnight, and to all appearance, *the morbid action has now entirely ceased.* With the exception of a single spot on the tip of the nose, all the crusts have exfoliated, leaving a delicate but healthy cuticle. The right eye, though inflamed, looks more natural than it did. The patient is gaining flesh, feels much stronger, and is in high spirits. Reduce the dose of drops from forty to thirty minims, and take the quinine once a day only.

18th.—Conjunctiva more inflamed and painful. Reduce the dose to twenty-five minims.

28th.—Conjunctiva much better, but a small tubercle appears on the inside of the nose. Take thirty-five minims for a dose.

Oct. 14th.—Much the same. Take forty minims for a dose.

19th.—The inside of the nose is quite well again. Persevere with the full dose of the arsenic.

Nov. 26th.—Too anxious to bring the case to a speedy determination, I have pushed the full dose of arsenic to this time, in spite of the severe conjunctivitis, and contrary to my customary and avowed practice: but instead of gaining time it is impossible to calculate how much has been lost. The eyes are very much inflamed, and there is a copious fluid discharge from the nose, but without catarrh. A fresh tuberculous incrustation of small dimensions has now appeared on the edge of the nose. Believing that the system was somewhat overladen with arsenic, I suspended its use altogether, and applied lunar caustic to the fresh tubercle, having first removed the adherent incrustation. I did this in the hope that the local affections might have originated from the arsenicalization of the system. In this opinion I was confirmed by the appearance of a very faint form of pityriasis over the trunk of the body, which I have observed in several cases to be a secondary action of arsenic. The skin appears of a dirt-brown colour, but the scales are visible through a lens.

Dec. 21st.—It is doubtful whether the caustic has been of any service, but the disease does not advance. The left eye is much better. Resume the drops in doses of thirty minims.

31st—Conjunctiva troublesome : she complains of palpitation of the heart and restless nights. Reduce the dose to twenty minims.

Jan. 26th, 1847.—The course of arsenic has been very much interrupted for the last two months. The conjunctiva is nearly well, and the patient has evidently escaped from the influence of the medicine. The result is very striking. The nose is red, swollen, and sore, within and without ; several new tubercles are developed, and there is a sense of heat in the parts. Aperients and reduced diet.

Feb. 3.—Much better but weak. Tubercles taking their usual course. Resume the arsenic in doses of thirty minims, and take two glasses of port wine daily.

18th.—The conjunctiva is again sore, and the disease is again yielding. The interior is much better, the redness and heat are nearly gone ; and the right eye, which had been so long the seat of the disease, is very much better : the eyelids not so much inverted and the irritation relieved.

May, 1857.—Though the salutary influence of the arsenic has been marred by various causes, it has long ago destroyed the tendency to ulceration. And, excepting the loss of substance and a slightly irritable condition of the parts so long affected, there is no disease, or tendency to it. The patient is in a better state of health than she had experienced for twenty years. She has constantly taken exercise in the open air, in all weathers, not only without injury, but with a decided benefit to her health, and with a refreshing, cooling effect on the nose and face. She has frequently taken quinine, cod-liver oil, and other tonics with great advantage. At one time (1854) iodine was substituted for arsenic with decided advantage. *She took arsenic with little intermission for eight years, and without the slightest damage to her health.*

I have now treated upwards of forty cases of lupus exedens, chiefly by arsenic, which has almost invariably succeeded when the patient has been healthy and

under fifty years of age. In two cases above that age the disease has been arrested for a time, but not permanently cured. The following case is an exception, the disease having yielded to cod-liver oil.

CASE 51.—*Lupus Exedens, cured by cod-liver oil.*

M. R., aged 22, single, has been the subject of lupus exedens since she was ten years old. It commenced in the nose and then ulcers formed on both cheeks, involving nearly the whole face.

June 19th, 1855.—The face is in a state of pitiful deformity, the lower third of the nose is eaten away, eight or nine unhealthy ulcers are distributed about the cheeks and brows, and nearly the whole of the unbroken skin is swollen and of a livid colour. The patient declares herself in good health, complains of no pain, and reports that the ulcers are worse at the period of the catamenia, which are regular. Her complexion is very fair and she is evidently of a strumous habit. She was immediately put upon a course of arsenic in the usual doses.

26th.—Face no better, considerable dyspnœa. Bowels costive. Discontinue the arsenic, and take a teaspoonful of Dr. De Jongh's cod-liver oil thrice a day, and pil. rhæi comp., ten grains every other night.

Aug. 28th.—She has persisted in this plan of treatment with great regularity till now. The face is much less swollen, but still discoloured. *The ulcers are all healed.*

From this period the ulcerative process altogether ceased. She continued the treatment, however, until

Jan. 8th, 1856, when the skin was perfectly sound; but it had, and still has, a red appearance, streaked with purple, as though she had been exposed to severe cold. On this day I introduced her to the Fellows of the Medical Society of London, some of whom appeared to think that the discoloration was due to latent disease, which would break out again.

May 26th, 1857.—There has been no return of the ulceration, although she has had rather a severe attack of erysipelas each winter, and has been otherwise out of health. Of late she has been suffering from extreme costiveness and sickness, requiring the use of croton oil. In consequence of this she discontinued the cod-liver oil

for a month, and then she had a little tenderness in the integuments of the cheek, which subsided on resuming the oil. It cannot be denied that the oil has cured the dis-

Lupus Non-Exedens. This is a tuberculous disease of the skin, of very slow growth, in which the tubercles are for the most part confluent, very little disposed to pustulation, and still less to ulceration. They become covered with a scaly incrustation sometimes mistaken for the scales of lepra, but the process of desquamation is much less rapid and obvious, and instead of spreading over the body, it commonly fixes on the cheek, and assumes an irregular rounded form, very slowly extending on one side and healing on the other side, or in the centre, leaving a whitish, irregular scar like a burn, which is permanent, and has been mistaken for vitiligo. This disease, like lupus exedens, commonly attacks young and healthy females.

Treatment. Arsenic will slowly arrest and modify the disease, and in some cases cure it; but its action is by no means so certain as in lupus exedens. In all cases it should be administered with perseverance and caution, as it appears to be the only medicine which has any control over the disease.

ELEPHANTIASIS. This name is given to a great variety of diseases very uncommon in this country. My own experience in these diseases has been too limited at present to justify me in speaking confidently as to the treatment.

FRAMBÆSIA, (*yaws*) is still more rare in England, being indigenous only in Africa, or possibly in the West Indies.

CHAPTER IX.

ORDER VIII.—MACULÆ.

MACULA, (*spot,*) *a permanent discoloration of some portion of the skin, often with a change of its texture.*

To this order Willan has allotted two genera, viz. 1. *Ephelis*, Freckles; and 2. *Nævus*, congenital excrescences and discoloration of the skin, commonly known by the name of mother's marks; spots, &c.

In the definitions and divisions of this order, Willan has been singularly unfortunate. The discoloration of freckles is not in many cases "permanent," but ephemeral; and Nævus is not always "congenital," nor necessarily "permanent," as I shall take occasion to demonstrate.

EPHELIS (*freckles*). The cognomen *ephelis* has been given to certain forms of pityriasis. Its more ordinary form, freckles, I have rarely been called upon to treat. The diluted sulphureous acid may probably have some trifling effect in dissipating them.

NÆVUS (*mother's marks*) has always been regarded as a local affection, and treated, (where treatment has been necessary,) by local appliances. The nature and etiology of the disease have as yet received no explana-

tion; and its very usual commencement *in utero*, as well as its very generally passive condition during the whole life of the individual, have led many to regard it rather as a local vascular malformation, than as a disease. Between disease and deformity, however, there is a wide gulf; and the question should not be dismissed without thoughtful consideration. Congenital diseases deserve, on many accounts, more attention than is usually allotted to them; and the universal opinion, not of the vulgar only (as we are prone to suppose), but of probably the whole sex, that "mother's marks" are actually the results of certain "longings" or antipathies on the part of the mother, entitles the subject under review to a more careful research than has yet been bestowed upon it. Its practical bearings also are highly important; the more so that they appear to have been misunderstood, the remedies having been hitherto directed (with a zeal which would have done honour to a former age) to local treatment only.

I shall endeavour to show that nævus, whether congenital or otherwise, is always a constitutional affection; that it originally consists of a morbid action which, when congenital, generally ceases spontaneously at birth; but may at any time be renewed: or, if non-congenital, may be originated whenever the state of the system becomes favourable to its development; and that then it can only be controlled by remedies which act on the general system. The following case embodies and illustrates my views.

Case 52.—*Nævus Areanus cured by the internal exhibition of arsenic.*

Sarah G., aged 6, was born without any appearance of

nævus; and has had excellent health from her birth. About a year ago a spot appeared on the cheek, nearly an inch below the left eye, of a faint purple tint, which gradually increased in size, until it became evident to the naked eye that from a central spot radiated a congeries of enlarged blood-vessels, the whole occupying a space about one-sixth of an inch in diameter. Her grandmother is reported to have been similarly visited very early in life, and the disease is said to have advanced until in old age it produced frightful deformity, drawing downwards the lower eyelid, so that the eye could not be shut, and contracting into puckers the integuments of the cheek. A female cousin of the child is represented to be also suffering under a disease in the same locality, supposed to partake of the same nature. Under these circumstances the parents of the child are anxious to know if anything can be done to arrest the growth of a disease which seems to threaten ultimate deformity, or something worse.

Jan. 22nd, 1846.—The spot exactly answers to the description of nævus araneus, as portrayed by Willan, Bateman, Rayer, and other authors, and is accurately delineated in the plates of Willan and Rayer. There is a central red spot, from which enlarged blood-vessels radiate tortuously, something like the legs of a spider. I touched the spot freely with lunar caustic, and upon the separation of the eschar, no change was perceptible in the vessels. I then applied nitric acid rather freely, not only to the spot, but beyond its extreme circumference. This appeared to destroy the disease: but it soon returned.

March 21st.—The spot has reappeared just as at the first. The nitric acid was applied a second time.

25th.—The original spot appears to be again partially destroyed, but a smaller spot is now observable on the right cheek, immediately under the lower eyelid. It has exactly the character of the former. It now occurred to me that for this second local affection, as well as, doubtless, for the first, there must be some constitutional cause: and although the child appeared otherwise in excellent health, I determined to try the effect of alterative treatment, and to discontinue the local applications. Five minims of Fowler's solution of arsenic were ordered to be taken thrice a-day.

April 1st.—Slight fever; white furred tongue, and other

symptoms of gastric irritation now appeared. Ordered a cathartic dose ; a saline effervescing medicine at intervals, and the arsenic to be suspended.

11th.—The patient has recovered her general health. Ordered to resume the arsenic.

June 11th.—The arsenic has been taken steadily for two months, and the conjunctiva is slightly inflamed. Both the spots have entirely disappeared. To the lesser and more recent one, no excrnal application has ever been used. Reduce the dose of arsenic.

July 13th.—There has been no return of the nævi ; but the patient has had a scaly eruption behind both ears, of an inflammatory nature, which has yielded to purgatives and salines ; the arsenic being steadily persevered in.

Sept. 21st.—Both the nævi have so entirely disappeared that it is difficult to pronounce upon their former locality. The squamous disease is quite gone, and the patient is in perfect health.

I should have supposed that the gastric irritation which occurred on the 1st of April (six days after the commencement of the arsenical course), was the effect of the mineral, but that it never returned when the use of the arsenic was resumed in the original dose, which dose was not reduced until the lapse of two months; when the conjunctiva became affected.

Vascular nævi, which according to Dupuytren are composed of erectile tissue, may either be stationary and harmless, or they may gradually increase in size until they ulcerate, or even assume a fungoid character, and prove fatal from hemorrhage. It is the opinion of all surgeons that, to prevent the possibility of such a termination, they ought to be destroyed as soon as the tendency to grow becomes obvious: but the most eligible mode of stopping their growth has become a question on which there is a great variety of opinion. The nitric acid is supposed to be competent to the destruction of small superficial nævi; but, as has been shown, it is not to be depended upon as a permanent

cure. Excision is equally fallible, as the disease will be liable to recur either in the same or another locality; and this is true of all growing nævi, whether large or small. Whether the vascular tissue be broken up by means of a cataract needle, as recommended by Dr. Marshall Hall; whether the stimulus of vaccination be applied; whether the supply of blood be partially cut off, by tying the artery which feeds the nævus; or whether it be destroyed by powerful escharotics;—in short, whatever be done *locally*, and locally only, the nævus will very probably return in some locality or other, unless attention be paid to the constitutional origin of the disease. In the case above related, the disease existed in the mildest and most minute form consistent with actual growth. It appeared to have been utterly destroyed by escharotics, but yet returned again and again, and at length asserted its true nature by choosing a second locality, and was ultimately cured by internal treatment alone; the disposition to morbid action (that potent, secret, unknown, but prolific source of local disease) being destroyed by the salutary action of arsenic. Nævus, then, is a constitutional affection, and, when growing, requires constitutional treatment.

But what is the pathology of the disease as it occurs *in utero?* There is but one rational mode of explaining it. There must be something in the maternal system which is the cause of faulty vascular development in the fœtus; since, when the new being assumes a separate existence, the morbid action is generally rectified, and nothing remains but the malconformation of certain vessels not susceptible of rectification, even under healthy action. Should the morbid condi-

tion of the mother be so communicated to the child that it cannot be thrown off by the energies of organic and independent life, the nævus grows just as it does when it originates in a child not congenitally marked, as in the above case.

The etiology of the disease in its congenital form is a very curious question, and not altogether without practical interest. The existence of fastidious tastes, appetites and antipathies, at certain periods of utero-gestation, is a fact. It is not affectation, for it is known to occur in animals; and it is reasonable that it should be gratified. It is an instinct of nature; and to disobey or resist its dictates is not only wanton cruelty, but it may, or must, inflict some injury either upon the mother or the child. From time immemorial all women have believed that the child is the sufferer, and that those vascular formations called mother's marks are the results either of certain disappointed longings, or of the sight of some object of strong aversion. The supposed correspondence of the size and shape and colour of the maculæ to the same qualities in the desired article of diet, or object of antipathy, may be, and probably is, unfounded and absurd; but if the various local diseases in the skin treated of in the preceding pages originate, as I suspect they do, either in some vitiation of the blood or disorder of the nervous system, it is easy to imagine that some fœtal disorder of a similar nature may result indirectly from the incidental causes above alluded to.

CHAPTER X.

ULCERS OF THE LEG.

Ulcers and their treatment are, for the most part, fully discussed in works on general surgery. I therefore do not propose to speak of ulcers in general; but ulcers of the lower extremity, especially when connected with a varicose state of the veins, are not treated, as a general rule, very satisfactorily or successfully, either in public or private practice. Therefore, regarding these ailments as diseases of the skin, I include them in the same category as the chronic diseases discussed in the preceding chapters.

The ulcers of which I am about to speak, are chiefly confined to the labouring classes. They are by far the most frequently met with in women, and still more commonly in those who have borne children. They are, for the most part, disposed to heal when the patient is confined to the recumbent posture, the wounds being treated with simple dressing. Hence, with a few rare exceptions, these cases recover sooner or later under hospital treatment; but as soon as the patient is discharged, and again pursues her daily toil, especially if she be a laundress, or otherwise occupied in a standing posture, the wound breaks out afresh, and is seldom healed until she re-enters the hospital, or otherwise obtains rest in the horizontal posture.

In this way, thousands of poor women in this country, as well as many hundreds of poor men, are rendered comparatively useless to their families, and often reduced to extreme poverty and distress, spending half their days in crippled helplessness, and often suffering great pain, which, by destroying the rest at night, breaks down the health. Much misery and destitution would doubtless be prevented if a method could be devised of healing these ulcers while the patient is allowed the free use of the lower limbs. That this may generally be accomplished, I have had ample practical evidence; and this I shall endeavour to prove, not by introducing any new method of treatment, but rather by showing why the established and approved methods so frequently fail.

But it will be necessary first that I should define the character of the ulcers to which I allude.

The lower extremity is subject to three kinds of ulcer—the strumous, the syphilitic, and the venous or varicose. There are other kinds, but they are far less common.

The *strumous* ulcer occurs frequently in children and young persons: rarely in the mature or aged. Its character is that of suppurative inflammation, terminating in a languid-looking sore on a livid ground, frequently presenting tumid and flabby granulations.

The *syphilitic* ulcer of the leg is always secondary or tertiary, and will break out afresh years after all suspicion of the infection of lues has gone by. It is a deep irregular sore, surrounded by a reddish brown blush, and often burrowing under the dermis, sometimes leaving between two sores a band or bridge of copper-coloured integument, which overlies a slough,

Mercury is the remedy for this kind of sore; and cod-liver-oil is the best remedy for the strumous sore. But I merely allude to these specific ulcers in order that I may not be supposed to confound them with, or include them in, my description, of

The *chronic venous* or *varicose ulcer of the leg*. This is a purely local affection, and depends in every instance upon some interruption in the venous circulation.* From some imperfection or inaction of the valves, the venous blood is thrown back upon the capillaries, the nutrient process is vitiated, and an ulcer results. The varicose state of the veins is often seen in the prodigious distension and serpentine course and thickened investments of the external veins of the leg, and sometimes of the thigh. In other cases, it is not observable externally; but the disease still appears to arise from interrupted circulation, probably in the deep-seated veins. The ulcer may vary a good deal (in different cases) in extent, in depth, and in character. It may be as small as a split-pea, or it may extend all round the leg, or even occupy one-half or three-fourths of the entire limb: it may be superficial and cutaneous, or it may extend to the bone: it may be phagedenic and gangrenous, or inflammatory and irritable, or indolent and stationary; but it is always deficient in granulations, and more or less unhealthy. It is frequently surrounded by a feeble or disorganised dermis, assuming the form of a scaly, papular, erythematous, or vesicular eruption; or the limb may in one case be wasted and scarred; in another, swollen, hypertrophied, or œdematous; and in a third, the cellular membrane

* The wearing of *garters*, tight or loose, I believe to be the remote cause of varix in nine cases out of ten.

may be infiltrated with adhesive exudation, and the joint more or less anchylosed. The constitutional disturbance varies with the character of the ulcer. The system is often severely affected when there is active phagedena or an extensive destruction of parts; or when, as often happens, the pain is so severe as to disturb or destroy the patient's rest: but, in the majority of cases, the general health is very good, and the disease has the character of a local affection arising from local causes. Indeed, many patients believe that the ulcer is salutary, and that it could not be healed without the risk of damage to the general health. And it is well if the practitioner does not in some degree sanction, silently or otherwise, this unfounded, and now nearly obsolete prejudice.

Constitutional Treatment. When the ulcer is connected with well marked disease of the surrounding skin, the case may require alterative treatment, and, if acute inflammation be present, leeches and purgatives; when it is sloughy or gangrenous, tonics and stimulants may be necessary; but when the health is good, and there is no strumous or syphilitic taint, internal medical treatment is rarely required for the healing of the sore, although, if the discharge has been copious and the ulcer of long standing, it is a safe and useful plan to accompany the surgical treatment with a course of moderately active purgatives or diuretics.

Surgical Treatment. I may assume that the reader is well acquainted with the plans of treatment proposed severally by Messrs. Whately, Baynton, Scott, Spender, and other writers of more recent date. These are all founded on the simple principle of giving due artificial support to the limb, by the application of

plaster or bandages; the practice of each differing only in unimportant details—Mr. Whately dressing the ulcers with pledgets of cerate; Mr. Baynton and Mr. Scott using adhesive plaster; and Mr. Spender chalk dressing. In the hands of all these surgeons, I do not hesitate to say that equable pressure is the chief agent in the cure; and the extraordinary success attending the practice of each one, consisted mainly in the skill and adroitness, attained only by long practice, in applying the bandage or plaster so as to make it press equally on every portion of the irregular surface of the limb. The usual hospital practice is the same in principle. The German poultice is a convenient dressing; and while by the recumbent posture the vessels are relieved of the distension occasioned by the gravitating fluids, the atmospheric pressure on the limb itself forms, in that position, a sufficiently powerful, as well as an elastic bandage, affording a constant and equable pressure on every portion of the surface. It is not necessary that I should comment on the very ingenious device lately proposed by Mr. Gay, consisting of an incision into the integuments surrounding the ulcer, where the healing process is prevented by the tight and contracted condition of the neighbouring skin. To this I have no objection to offer; but it does not apply to the great majority of cases under consideration, if, indeed, to any of them.

Modern surgery, therefore, is competent to the treatment of ulcerative diseases of the leg. There is, I believe, no essential defect in it, no necessity for anything new. Why then is it so notoriously unsuccessful? Mainly because the application of a bandage is looked upon as an easy and simple operation, which

may safely be entrusted to the patient, the nurse, or the dresser; whereas I know of few operations in surgery more difficult to perform, or requiring more painstaking practice, than the application of a bandage to the human leg in such a manner as that every portion of the limb, from the toes to the knees (including especially the hollow between the heel and the inner and outer malleolus) shall receive equal and abiding support. In the careless manner in which a bandage is commonly applied, it often does more harm than good. If it be at all tighter round the leg, for instance, than round the foot, the foot and ankle will become swollen and œdematous; and on removing the bandage there will be seen deep fissures where one edge of the bandage has been unduly tight, and a puffiness in other parts, which adds to the interruption of the circulation. And it is extremely difficult wholly to avoid this unequal pressure. There are also other impediments to success; and at the risk of being tediously minute, I must beg attention to several important details.

First, the *dressing* of the ulcer is a point of little moment as regards the ultimate success of the bandage; but time will be gained by a proper dressing, the treatment will be more speedily successful, and the patient will have much less to suffer. Certainly there is no dressing which deserves the name of a panacea. The appearance of the ulcer, not very easily described, always suggests to the practised eye what will best suit it.

Offensive ulcers, especially if they are disposed to gangrene, are easily and readily convertible into healthy sores, by simply filling them with a powder consisting of equal parts of finely pulverised vegetable charcoal

and prepared chalk. Over this a poultice may be applied if the sore be very irritable; but it is generally sufficient to apply over the charcoal a piece of dry lint and bandage. On dressing it the next day, the wound is seldom offensive; and on the third or fourth day, if the patient's health be duly attended to, it is commonly converted into a healthy looking sore.

Very painful and irritable ulcers, disinclined to heal, I usually dress with a dossil of lint dipped in chloric ether, and then apply the bandage. This gives severe pain for a few minutes, but the patient will get a good night's rest, and never objects to its repetition.

Sanious ulcers, having no defined edge or depth, require a free application of nitrate of silver or a solution of sulphate of copper, as also do those sores in which the granulations are excessive.

Sluggish ulcers, covered with a tenacious yellow coat of muco-pus, are often roused into healthy action by the application of a little finely powdered nitrid oxide of mercury, or an ointment of the same material—two drachms to the ounce.

Ulcers with hardened cartilaginous edges require severe pressure. A dossil of dry lint should be applied to the surface of the sore, and then the edges of the ulcer should be very tightly drawn together with strips of adhesive plaster; over this should be laid a piece of tow or wadding, and the whole supported by a flannel bandage applied as tightly as possible. Under this treatment, the absorbents are awakened into activity, and the sore becomes very manageable.

Sores of the more *ordinary character* I generally fill with dossils of soft dry lint, placing over this a pledget of spermaceti ointment, and a bandage applied with

gradually increasing tightness, *i.e.*, more and more tightly every day.

All these ulcers require daily dressing for the first fortnight or more, until the discharge has nearly ceased; and then forty-eight hours may be allowed to elapse between each dressing. As the granulations arise, they sometimes require a touch with the sulphate of copper, or lint dissolved in a solution of the same.

BANDAGES. *Calico and linen bandages* are generally inefficient and often useless. They do not yield sufficiently to the motion of the limb; consequently, they cut the leg on one edge, and become loose on the other. The elastic cotton bandage sold at the shops is a very stupid affair. The two edges are stitched together, and form a cord, which cuts the leg if the bandage is tightly applied; and, if not tightly applied, it is useless. If the ulcer is disinclined to heal, a *flannel bandage* is essential to its permanent cure. This bandage should be made of moderately fine Welsh flannel, from seven to eight yards long, according to the size of the limb, without a single joining, and exactly two and a half inches wide. The flannel should not be coarse, for then it is too rigid and rough for the tender skin; neither should it be very fine, otherwise it will fall into folds or become loose. If the breadth be more than two and a half inches, it is impossible that it should lie smoothly about the foot; if less than two and a half inches, the portion enveloping the calf will slip out of place as the patient walks. But, as the flannel shrinks in washing, if the patient have a large leg, two inches and three quarters may be allowed for new and unwashed flannel, to commence with. So long as there is any discharge from the wound, it will be

necessary to have a clean bandage daily. The patient should therefore be supplied with two bandages, and be admonished not to have them washed in very hot water, as they will shrink, and become thick and unyielding.

Application of the bandage. Before applying the bandage, it should be rolled up very tightly and evenly, otherwise it will slip on being applied. The wound being dressed, the patient should sit in a chair, and place the heel on the *corner* of another chair, so as to give room to apply the bandage to the heel. The first turn or two should be taken round the foot close to the little toe, taking care that every turn is even, so that one edge of the flannel does not cut while the other is loose. The next turn should be round the ankle, just as far from the heel as is requisite to lay the bandage even and tight; next round the foot again, nearer the heel than before; then round the point of the heel, and over the instep; then under the foot, and, slantingly inclosing the hollow of the inner malleolus, it should be brought again round the leg, and afterwards round the hollow of the outer malleolus; then round the point of the heel a second time, and round the foot a fourth time; then round the leg, and carried spirally over the calf up to the knee, allowing the bandage to take a turn on itself just as often as it fails to lie even and flat without such a turn. Care should be taken that the bandage is rather tighter round the foot and instep than round the small of the leg and calf. The bandage should reach to the knee, where it should be pinned, not tied, and the stocking should be pulled over it, no garter being allowed on any account. If the patient complains that the ban-

dage *cuts* anywhere, it should be taken off, and re-applied with additional care. It is very often requisite to apply a compress of tow or cotton wadding to the hollow of the ankle, to secure sufficient pressure there, especially if that be the seat of the ulcer, which often happens. In the method of applying the bandage recommended in books on surgery, and even by Whately himself, this part is left altogether unsupported, and the pressure is applied to every part of the leg except where it is most wanted. It requires some practice to adjust this matter nicely without putting too many folds round the foot; but it may be done, and is worth the trouble, inasmuch as without it we may fail.

The advantage of a flannel bandage over a cotton one is threefold. First, flannel is a bad conductor of heat, so that the wound is preserved in a uniform temperature. This is very important. Frequent changes of temperature present a great impediment to granulation. Mr. Crompton of Manchester has shown that the great advantage of dressing burns and scalds with flour, wadding, or wool, consists not in excluding the air, as is commonly supposed, but in preserving an equable temperature. Thus I have found ulcers of the leg, in cold weather, heal rapidly under a flannel bandage, which refused to heal under a cotton one. Another advantage of flannel is, that it yields a little (not too much) to the motion of the leg. I have had patients who have walked miles to be dressed, without complaining, with a flannel bandage, who could not endure the pain of standing in a cotton one. Thirdly, the flannel, having a rough surface, adheres to its own folds, and does not slip down the leg. A well applied

flannel bandage will keep its place a week, night and day. A cotton or calico bandage will scarcely remain in place an hour.

Covering the whole foot and leg with adhesive plaster, as recommended by Mr. Baynton, and practised by Mr. Scott, is open to many objections. 1. Unless it be removed daily, it confines the discharge too much, whereas this readily escapes through the pores of the flannel. 2. As it requires daily removal, it is apt to irritate the skin, often already irritable from disease; and, in male subjects, it adheres painfully to the hair on the legs. 3. It confines the muscles too much, and is a great hindrance in walking. When wounds require adhesive plaister, two or three small strips are sufficient with a bandage. 4. It is expensive and troublesome, and is much missed when the patient leaves it off. Notwithstanding these objections, it succeeded marvellously in the hands of Messrs. Baynton and Scott.

It often happens that, on the first application of the bandage, the leg becomes more painful, the discharge from the wound more copious, and the wound looks irritable and foul. This is particularly the case where the limb is œdematous, and the fluid is forced through the wound; but the second or third dressing finds the swelling reduced, the wound less painful, and disposed to heal. It is very important that the bandage be applied in the early part of the day.

It has been proposed to relieve the venous pressure which originates these ulcers by cutting out the portion of the vein containing the diseased valves. This is very uncertain in its results, and by no means a safe operation. A better plan is to bind a small piece of

nitrate of silver on the vein; but there is reason to believe that, as the varicose veins often disappear after the bandage has been worn for a few months, the valves recover and resume their proper office without any operation for their destruction.

When the ulcer is situated on the sharp edge of the tibia, just on the shin, a tight bandage is not admissible; but a piece of spongio-piline or wadding may be placed on the sore, and a well adjusted bandage applied loosely over it.

Under the careful management above described, a very large majority of ulcerated legs may be soundly healed, even while the patient is pursuing his or her ordinary avocation; and I have frequently succeeded with patients in the country who actually walked six or eight miles to be dressed, and then walked back again. There are a few cases, however, in which I have been obliged to insist upon the patient resting for the first week or two; but if the sore be thus *healed*, it invariably breaks out again, and does not prove to be soundly cured; whereas but few of the patients who are allowed to walk, ever return for after treatment.

This is one of a few neglected subjects in which, at the present moment, the profession is most deeply interested. This branch of practice is known to be very much monopolised by old women and quacks; and we are apt to forget, in our zeal for medical reform, and amidst our earnest appeals to the legislature for a legal separation between the qualified and unqualified practitioner, that quackery thrives as easily on our own neglects as on the ignorance of the public; and

that there are public men who know how to throw this in our teeth. So long as there are certain classes of disease which are thought unworthy of the attention of the hospital teacher and college examiner, so long will the profession itself prepare a fruitful soil in which quackery will grow and thrive. Now, the practice I have herein advocated is founded on a *principle* on which all practical men agree—that of giving firm, constant, and equable support to the whole surface of the limb, from the toes to the knee. If this principle were universally understood and carefully acted out, we should hear of no more incurable bad legs healed by Holloway's ointment—no more amputations for mere ulceration—no more ankylosed joints from the mere inaction of the joint induced by the tenderness of the skin or the presence of an old and irritable ulcer.

CHAPTER XI.

ON THE PREVENTION OF DISEASES OF THE SKIN.

THE prophylaxis of cutaneous, as of other diseases, is a branch of hygiene or sanitary science. Whatever is generally necessary for the preservation of human health, is also, in its degree, preventive of diseases of the skin. But over and above general sanitary appliances, such as pure air and ventilation, wholesome food, temperance, exercise, bathing, pure water, sufficient rest, warm clothing, early hours, &c., &c., there are special rules to be observed for the prevention of special forms of cutaneous disease; and whenever the patient has actually suffered from them, or is likely to suffer from them, from hereditary or other causes, it will be advisable for him to adopt very carefully these preventive measures. But in order to appreciate their value, it will be necessary to reflect on the pathology of cutaneous disease generally,* including the object

* By pathology, I mean not what the term is now supposed to mean, but what it was understood to mean in the last generation, namely, *the study or science of disease*; not the *anatomy* of morbid changes, very properly called by Baillie and Hunter, and the great ones of their time, "Morbid Anatomy"; and I protest against the confusion of terms and the consequent obscurity produced by calling morbid anatomy by the misappropriate and pedantic term "*Pathology*". The society formed for collecting and observing the change of structure produced by disease, properly the *Morbid Anatomy Society*, has also affected the name of "pathological". Among other evils attending this misnomer, may be mentioned that the study of disease in its relations

which nature has in view in establishing it, and the method of accomplishing that object by other means, and so preventing the necessity of skin disease. There are also other materials from which to glean our prophylactics of skin disease, which we shall notice as we proceed.

It has been assumed in the preceding pages, (and the assumption is sanctioned by the suffrages of the profession), that the apparent object of nature (so to speak) in throwing out an eruption on the skin is to eliminate some poison, or to relieve the system from some plethora, or deficiency in the circulating fluids. In other words, there is something wrong in the blood, which the eruption is intended to rectify: and it is obvious that, in some instances, the particular form and character of the eruption presents a clear indication of the nature of that special poison by which the general disorder is originated and sustained. Thus the eruptive fevers (each in obedience to the stimulus of the special poison which originates the disease), throw out a special eruption through which the poison is eliminated in part, and we know the disease *by* the eruption. But this is rarely the case in the chronic class of eruptions. Therefore, although we can prevent small-pox by vaccination, and keep measles and scarlatina at a distance by avoiding all communication, direct and indirect, with the subjects of them; yet we cannot tell how to avoid lepra, eczema, and other eruptions of this class, by avoiding the poison which produces them.

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to physiology, the favourite study of all physicians, from Hippocrates to Sydenham, has now become nearly obsolete, and the morbid organism of the dead body has absorbed that share of attention which was once thought due to the morbid sympathies of the living.

The following general rules, however, if adopted rigidly, would go far towards preventing the severity of suffering produced by skin disease, and, in many instances, securing an immunity from them altogether.

1. The skin itself should be cared for; it should be kept clean, warm, and in the full performance of its functions. These functions are for the most part carried on insensibly, but they are not the less important on that account.

A very large amount of fluid, in the form of invisible vapour, is discharged from the whole surface of the skin every twenty-four hours. It is only when it is discharged so rapidly as to be condensed on the surface, that we become sensible that we are perspiring; and this may take place not from rapid exhalation only, but from a state of the atmosphere already laden with vapour; or from wearing an impervious garment through which the transpired vapour cannot possibly escape.

Sensible perspiration, depending as it does on various accidental circumstances, is rarely necessary to health. The skin may perform its functions normally and efficiently, especially in winter, without becoming moist; but in all weathers it ought to be moderately soft and supple, not absolutely dry or harsh. The transpiring function is encouraged by bathing or washing with soap and water, friction of the skin with the hands, or hair gloves, frequent changes of linen, and especially of the flannel waistcoat, when one is worn next the skin, clothing sufficiently warm, active exercise, a sufficiency of bedclothing in cold weather, and the respiration of a pure

air. The influence of exercise in preventing scaly diseases of the skin is often very extraordinary. Many cases have occurred in which patients who, when pursuing a sedentary life, were martyrs to lepra, became comparatively free from the disease when engaged in active occupation in the open air. There cannot be a doubt that in these cases the insensible perspiration was, by exercise, increased in amount, and thus the vessels of the skin were relieved of any tendency to congestion, and, at the same time, probably some blood-poison was eliminated, which was the cause of the disease.

2. The general health should be cared for, not less than the skin; for if skin-disease is an effort of nature to restore the health, that effort would not be required if the health were perfect. Now, besides the general rules for the preservation of the health, to which it is scarcely necessary for me to do more than allude, there are certain organs which have a close sympathy with the skin, the functions of which ought to be carefully watched. These are the lungs, the bowels, and the kidneys, which, together with the skin, form a sort of fourfold way of escape for the effete materials which have to be separated from the blood during the process of assimilation and nutrition. If any of these effete elements remain in the blood, from the complete failure of any of the above-named important organs, the blood is poisoned, and the patient dies;—instantly if the *lungs* fail, in a few hours if the *kidneys* fail, in a few days if the *bowels* fail, in a few hours, days, or weeks, (as the case may be) if the *skin* fails. But when the failure is not complete, which is much more common, then, by a beautiful provision of nature,

one or more of these organs will, to some extent, perform the functions of another, for a sufficient time at least to allow of the maimed organ to recover. Thus, if the lungs fail in part, as in asthma, phthisis, &c., we frequently observe an attempt to perform their office, by the skin, the bowels, and the kidneys. Hence the drenching perspiration of asthma, the hectic sweats and diarrhœa of phthisis, and in both diseases, at times, copious urination. If the kidneys fail in part, there is rapid respiration, and the writer once saw a copious discharge of pure urine from an eruption on the legs; and when this discharge ceased the patient died. If the bowels fail, the other eliminative organs are disturbed. After a time the breath and the cutaneous exhalations both become more or less offensive, and sometimes have a distinct fæcal odour. And, lastly, if the skin fails, especially if nearly the whole surface is diseased, as in some cases of small-pox, psoriasis inveterata, &c., the respiration is hurried, the urine copious, and diarrhœa is a very usual complication.

It is needless to add that when one organ is called upon to perform not only its own work but that of another,—work to which it is not by nature adapted,—it is liable to become diseased. If, therefore, we would preserve the health of the skin, we must preserve it from the necessity of performing vicarious offices, by paying due attention to the healthy condition of the bowels, lungs, and kidneys. How this is to be done, and to what extent we are called upon to adopt prophylactic measures, can only be determined by the particular features of the case But a world of cutaneous misery may be avoided by due attention to

the bowels. Happily we can act on them with more certainty than on any other organ, and in the choice of purgatives and their doses we must be guided by the constitution of the patient.

The functions of the uterus do not appear to have so much influence over female cutaneous disease as one would be led to expect: but there are cases in which the relation between the menstrual periods and the phases of certain eruptions are clearly obvious. So also there are diseases peculiar to puberty, and also to senectitude, which, if they cannot be prevented, may at least be mitigated, by a due regard to the peculiar conditions of the system at these periods respectively.

There are some diseases of the skin which are thrown out by a fit of indigestion, or possibly by some animal poison introduced into the blood, by eating shell-fish, or other articles of diet which *never agree* with the individual so affected; and yet perhaps he *will* eat them again and again. So again, many patients know full well that a bad attack of eczema, lepra, or lichen, is the penalty they must pay for indulging in beer, wine, or spirits; or even, in some cases, by partaking habitually of animal food. Therefore, it is needless to tell *them* how to prevent skin disease.

Diseases of the scalp, cachectic rupia and ecthyma, and scabies in its worst forms, may all be generally prevented by cleanliness, isolation, ventilation, and avoiding a too much restricted diet. Infants often get their blood poisoned with farinaceous food, when they require meat and vegetables (popularly so called), or at least some modification of diet, some deliverance from the unvarying slop. And children of older growth often pay dearly for their schooling, because their

scholastic habits are too closely gregarious for the human instinct, which loves the open air and the green fields. Many a large school-room is a nursery of disease. Animal poison, breath poison especially, contaminates the blood; and the best which can be said for the sanitary condition of schools for the poor is, that they offer to the children a temporary escape from worse evils at home.

Bathing. No class of philanthropists deserve higher praise than those who have promoted the establishment of public baths and wash-houses for the poor. The physical advantages thus conferred are beyond all calculation. Of the adult patients attending the Western Dispensary for Diseases of the Skin, nearly two-thirds have professed themselves in the habit of taking at least a weekly bath; and there is reason to believe that to this habit they are mainly indebted for the comparative facility with which these diseases have been successfully treated; and in many of them recovery could scarcely have been expected at all without this adjuvant. The avocations of some of them necessarily induce much personal uncleanliness, and in those who work hard, the frequent perspiration, drying and coating the skin with the effete matter, render frequent ablution of the whole surface an absolute and essential condition of health. Many individuals in the higher ranks secure a very considerable immunity from cutaneous disease by daily ablution, or the use of a daily cold bath, which not only preserves the skin in health, but prevents catarrhs, rheumatism, and gout. Between the warm bath and the cold, there is little to choose. The poor generally

prefer the former, which is certainly better adapted for cleansing the skin. But it should be taken late in the evening, and the bather, wrapped in a warm garment, should walk briskly home to his bed. This will generally prevent his taking a chill, the only objection to a warm bath. Nor can I forbear suggesting two improvements much required in most of our public baths. 1. The bather naturally reduces the temperature of his bath by the comparative coldness of the surface of his body, and the evaporation still further cools it. But it is highly desirable that when he leaves the bath the water should be some ten degrees warmer than when he enters it: whereas it is apt to be at least fifteen degrees colder. Therefore he should either be furnished with means to add hot water when he wishes to do so, and be admonished accordingly; or the attendant should, at the right time, turn on the hot water for him. 2. The evaporation is unnecessarily promoted by a very common arrangement by which the bath, being open at the top, the bather is exposed to the common atmosphere of a large portion of the building, an atmosphere always much colder, and in winter very many degrees colder than the water. The result is, that the water is not only speedily cooled, but the bather gets chilled in dressing, and often takes a catarrh. And this *taking cold* is so common, that it forms the chief objection alleged by the poor against bathing. Whereas, if the bath were closed at the top, as are the private baths, and the bather dressed himself warmly in the hot steam, he would then escape the chill. Breathing a close, damp atmosphere for a few minutes, would be a far less evil than the chill.

Air and Exercise. Those diseases of the skin, the cure of which is found most tedious and difficult, generally occur in the sedentary class. Shoemakers, tailors, weavers, sempstresses, and artizans of all kinds who work many hours per day in close, confined apartments, often suffer severely, both from general weakness and impaired health, as also from various cutaneous maladies arising from breathing impure air, from checked perspiration, and disuse of the muscles of locomotion. The bowels are generally constipated, and in females menstruation is scanty and painful, and both sexes complain of headache, dyspepsia, nervousness, and debility. Yet the remedy is much in their own hands. Most of them reside within easy walking distance of some of the now numerous parks provided for their health. Early in the morning, in the summer especially, for one or two hours before the day's work commences, the air of these parks is as pure and salubrious, and as sweet with the exhalations of leaves and flowers, as the most distant country park. A walk of three or four miles before breakfast, when once it becomes a habit, gives tone and strength and spirits for the sedentary toil of the day, in a degree incredible to those who never imbibe the sweet breath of morn. Yet the Regent's Park, accessible to tens of thousands, can scarcely count its early visitors by scores; and Primrose Hill is seldom crowned by more than a dozen strollers before the smoke from ten thousand chimneys obscures the view and pollutes the air. The only excuse for this general indifference to these salutary privileges, arises from the depression, one might almost say, distress, often attending the first attempt. But

this would be in a great degree prevented by a draught of milk, with or without a tablespoonful of rum, taken at starting; and as the habit when once established, soon imparts vigour and strength, the morning draught can, and ought to be dispensed with. Children old enough to walk a mile or two, derive much benefit from this practice; and both they, and the delicate or weakly should take a short walk at first, and gradually increase it. Even the streets of London are far more salubrious at an early hour, before the drains are disturbed, and the chimneys pollute the atmosphere, and far more pleasant, too, than any sleeping apartment can possibly be. I do not hesitate to say that by the morning walk and evening bath a large proportion of the skin diseases of the sedentary might be prevented, the general health of all invigorated, and the mortuary returns of the Registrar-General reduced more sensibly than by all the excellent sanitary improvements now in progress. The early-closing movement may be turned to good account by an evening stroll in the parks; but, as compared with the *early-rising movement,* it is unimportant.

The morning stroll has other recommendations equally strong, which it may not be deemed an unpardonable digression to mention;—I refer to its moral influence. The quiet of the morning invites, almost compels, calm meditation. To the young it offers no temptations. Places of questionable or immoral amusement are closed. The profligate, vicious and profane, are for the most part asleep, and for a time innocuous and inoffensive; the morning air often exhilarates, always refreshes and cheers the spirits. A gleam of hope, and a sense of peace and

tranquillity, if not of contentment and happiness, may beam on the mind, long depressed and fretful, almost as naturally on these occasions, as the rays of the rising sun enliven and adorn the scenes of nature. His must indeed be a misanthropic mind, who can, in these bright hours, brood over his troubles, or cherish thoughts of malice or ill-will. And let me remind the hale and active youngster, who naturally thinks that a lonely morning walk must be a "dull and stupid affair," that a moderate use of gymnastic exercises at the foot of Primrose Hill, or elsewhere, at five o'clock on a summer's morning, would invigorate his frame and improve his figure, without bringing him under the suspicion of being thoughtful or intellectual. And to all who are disposed to doubt the happy influence of the early stroll, and to regard this description as exaggerated and false, let me only say—"*Try it, and try it for a month.*"

DIET. "Is there any particular diet which will prevent diseases of the skin?" This is a question which our patients often put to us, and a very reasonable one too. But it is a question which scarcely admits of a specific answer: that is to say, the answer must depend upon the nature of the case. When patients adopt a code of diet suggested by their own medical views, they generally err. Women who have eruptions in the face, are apt to adopt too low a diet, with an idea that it is "cooling," and will therefore relieve the heat and redness of the skin: whereas the disease itself may depend on debility, and may require ample nourishment, or even stimulants, for its removal. There

are other cases in which the eruption is not red, and the patient, imagining that it depends on "poverty of blood," may indulge indiscreetly, and perhaps injuriously, on a rich diet. The pulse is sometimes an excellent guide in these cases. But as a general rule, severe cases of *scaly*, *papular*, and *vesicular* disease, (such as lepra, lichen, and eczema), require a low diet and cooling regimen; while *pustular*, *erythematous*, and *bullous* disorders ordinarily require a full diet. But there are exceptions, and these can only be diagnosed by the symptoms which indicate the state of the general system.

But, apart from these two qualities of diet (the full and sparing), are there no *articles* of diet which ought to be avoided in all skin diseases? Certainly the writer knows of *none*. There may be exceptional cases; but, as a *general* rule, I hold it to be presumption to prescribe any particular form of diet. The instinct of each individual patient will, if implicitly trusted, almost infallibly guide him both as to the quality and quantity of the diet best suited to his case both in health and disease. He must be a much wiser man than the author, who can go beyond this. We hear much of plain food, simple food, mutton and beef, &c. If man had been fitted by nature for plain and simple food, and for mutton and beef exclusively, for what purpose are we provided with such a host of dainties, animal and vegetable,—fish, flesh, fowl, fruit, seed, root, leaf, stem, &c., which our instinct has selected from every class, order, genus and species of living beings? Whence that taste for an unceasing variety of food, that gusto for every form of culinary preparation, that longing for hot drinks in winter,

cold acidulated beverages in summer; fruit in autumn, salad in spring, and variety at all times, to say nothing of certain longings in special forms and stages of disease? all which are as natural as the love of rest after fatigue, and the moderate indulgence of which is necessary, if not for health, at least for the full development of physical and intellectual power.

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